



Drug-related deaths in the UK

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***national programme on Substance
Abuse Deaths
(np-SAD)***

**Drug-related deaths reported by Coroners in
England, Wales, Northern Ireland, Guernsey,
Jersey and the Isle of Man; Police forces in
Scotland; & the Northern Ireland Statistics and
Research Agency**

Annual Report January-December 2008

**Hamid Ghodse
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Adenekan Oyefeso
Fabrizio Schifano
Kapil Ahmed
Vinesha Naidoo**

Preface

The Annual Report of drug-related deaths in the United Kingdom report published by the *national programme* on Substance Abuse Deaths (np-SAD) is used by universities, the UK Government, national and international agencies as an indicator of the extent and nature of drug problems and misuse, and makes a contribution towards the prevention of substance abuse problems.

The Programme could not achieve its goals and objectives without the collaboration and co-operation of coroners and their officers across England, Wales, Northern Ireland, Guernsey, Jersey and the Isle of Man. It is important to recognise that their collaboration has been on a voluntary basis and it is the fundamental reason for its success. We would like to thank them all for their active participation. Thanks are also due to the procurator fiscal for Dumbarton and the Scottish Crime and Drug Enforcement Agency (SCDEA) for continuing to provide information on drug-related deaths reported to the police in Scotland, and to the Northern Ireland Statistics and Research Agency for information on drug-related poisonings from the General Mortality Register. Their contributions are important as the Programme aims to maintain a UK-wide reporting system.

The findings indicate a decrease in deaths in 2008 reported directly to np-SAD by coroners when compared to the number reported in last year's report. However, when the figures for SCDEA cases are added the result is an increase in drug-related deaths during 2008 for the United Kingdom as a whole. These apparently diverging patterns underline the fact that further vigilance and constant monitoring of the drug-related fatalities situation is essential for understanding the evolution of the phenomenon. The np-SAD has now initiated an on-going programme of research to ensure that the quality, accuracy and comprehensiveness of the data received on drug-related death are further improved.

As in previous years, the statistics in this report are intended to inform authorities at the local, regional and national levels, as well as health professionals and the general public, about the serious consequences of drug abuse, especially polydrug use.

Three aspects have been selected for more detailed examination this year: (a) the role of alcohol in death; (b) drug-related deaths amongst young people aged 16 to 24 years (as defined by the Government's drug strategy); and (c) deaths of older drug users (aged 50 years or more).

The report also provides a number of indications of changes patterns of drug abuse, trends over time, and early warnings on emerging drug problems so that appropriate and timely action can be taken.

The Programme would like to express their thanks to the Department of Health for its support for this very important programme.

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Acknowledgements

We are grateful to the coroners listed below, their deputies, officers and assistants, for providing the information in this report. We apologise if we have inadvertently omitted anyone. This list may differ from the list of jurisdictions given in Appendix 1 due to the fact that many jurisdictions are being merged as coroners retire, and in anticipation of the expected re-structuring of the Coroners' Service in England and Wales. We wish all those who have recently retired all the best for the future, and thank them for supporting the surveillance work of the np-SAD. In some areas, the coroners do not have the resources to provide information but have kindly permitted others that collate such information to pass this on to us on their behalf; we thank those individuals who have contributed information in this way. We are also indebted to the Scottish Crime and Drug Enforcement Agency and the Northern Ireland Statistics and Research Agency for the provision of data relating to their respective countries. We would like to thank Alessandro Vento and Christine Goodair for their help in preparing this publication.

J R H Adeley, Preston & West Lancashire	V Hamilton-Deeley, Brighton & Hove
R J Allen, Wolverhampton*	M E Hassell, Cardiff & Vale of Glamorgan
E Armstrong, North Tyneside, South Northumberland	R Hatch, North West Kent
W J Armstrong, Greater Norfolk	D Hinchliff, West Yorkshire – Eastern
S Anderson, Northern Ireland	A V Hind, Blackpool & the Fylde
I Arrow, Torbay & South Devon, Isles of Scilly, Plymouth & South Devon	E S Hooper, South Yorkshire – Eastern
R D Atkinson, West Lincolnshire	D C Horsley, Portsmouth & South East Hampshire
R J Balmain, Black Country	M S Howells, Pembrokeshire
C M Beasley-Murray, Essex & Thurrock	J B Hughes, Central North Wales, North East Wales
P Bedford, Berkshire	R A Hulett, Buckinghamshire
D T Bowen, Gwent*	R. Hunter, Derby & South Derbyshire, (Acting) North Derbyshire
A M Bradley, Hampshire - North East	C W Johnson, Wirral
A Brown, North Northumberland	M C Johnston, Western Dorset
P L Brunton, Ceredigion	P Kelly, North Lincolnshire & Grimsby
M J C Burgess, Surrey, the Queen's Household	T Kelly, North Derbyshire
E E Carlyon, Cornwall	T H Kirkman, Rutland & North Leicestershire
T Carney, Gateshead & South Tyneside	P A Knapman, London - Inner West
N D Chapman, Nottinghamshire	J Leckey, Northern Ireland
R M Cobb, North East Kent	J Leeming, Greater Manchester - West
R H G Corner, Milton Keynes	P Maddox, Bridgend & Glamorgan Valleys, Powys
A K Cotter, Birmingham and Solihull*	C Mason, Leicester City & South Leicestershire
D Coverdale, City of York	J A Matthews, Isle of Wight
A R Craze, East Sussex	P B Matthews, City of London
A C Crickmore, Gloucestershire	I G McCreath, North Northumberland
P de Gruchy, Jersey	S McGovern, Coventry & Warwickshire
P J Dean, Southend & South East Essex, Suffolk	N Meadows, Greater Manchester - Central
C C Donnelly, Argyll & Clyde at Dumbarton	D Mitford, Newcastle upon Tyne
C W M Donnelly, Hartlepool	D S Morris, Bedfordshire & Luton, South & West Cambridgeshire
P Dorey, Guernsey	W R Morris, North & East Cambridgeshire
C P Dorries, South Yorkshire – Western	T M Moyle, Isle of Man
K M Dowding, Great Yarmouth	N Mundy, South Yorkshire - Eastern
E A Earland, Exeter and Greater Devon	S R Nelson, Greater Manchester - North
J P Ellery, Mid & North West Shropshire	
G L Fell, North Yorkshire - Western	
S P G Fisher, Louth & Spilsby, West Lincolnshire District	
P E A Forrest, Avon	
N G Gardiner, Oxfordshire	
M T Gwynne, Wrekin	
A A Haigh, South Staffordshire	
D M Halpern, Herefordshire	

M D Oakley, North Yorkshire - Eastern	I S Smith, Stoke on Trent & North Staffordshire
D J Osborne, Neath Port Talbot	E J E Stearns, East London
W J Owen, Carmarthenshire	C K Sumner, Knowsley, St Helens & Sefton
R N Palmer, Southern London	R J Sykes, Mid Kent & Medway
S Payne, Bournemouth, Poole & East Dorset	J M Symington, Leicester City & South Leicestershire
A Pember, Northamptonshire	J C Taylor, North & West Cumbria
J S Pollard, Greater Manchester - South	M Taylor, Boston & Spalding
D Pritchard-Jones, North West Wales	R G Taylor, East Lancashire
A J A Rebello, Liverpool	E G Thomas, Hertfordshire
H R Redman, Central & South East Kent	A M Thompson, Western London
A S Reid, London - Inner North	A Tweddle, Northern District of Darlington & South Durham, North Durham
N L Rheinberg, Cheshire, Halton & Warrington	M Voisin, (Acting) Avon
D Ridley, Wiltshire & Swindon	A Walker, North London
D Roberts, North & West Cumbria	P M Walters, Bridgend & Glamorgan Valleys
P Rogers, Neath Port Talbot, Swansea	R L I Whittaker, West Yorkshire - Western
M R Rose, West Somerset	G U Williams, Powys, Worcestershire
G S Ryall, Peterborough, Stamford	T Williams, Eastern Somerset
J C Sampson, London - Inner South	D Winter, Sunderland
G M Saul, East Riding & Hull	K S Wiseman, Southampton & New Forest
P.A. Schofield, West Sussex	
M J F Sheffield, Teesside	
B Sherrard, Northern Ireland	
G A Short, Hampshire Central	
A F T Sibcy, South Shropshire	
M J H Singleton, Blackburn, Hyndburn & Ribble Valley	
I Smith, South & East Cumbria	

* denotes data received too late for inclusion in this report.

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Key findings

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- ◆ Notifications of 1,490 drug-related deaths (DRDs) reported by coroners in England and Wales, Northern Ireland, the Channel Islands and the Isle of Man occurring in 2008 were received by the Programme.
- ◆ The total number of DRDs reported in 2008 indicates a decrease of 3.2% over the number reported (1,539) in the previous Annual Report.
- ◆ If the figures from the Scottish Crime & Drug Enforcement Agency are added, the total number of DRDs reported in 2008 for the UK as a whole would be 1,952. This represents an increase of 2.7% reported during the same period for 2007 (1,900).
- ◆ Data were provided by 109 of the 115 coroners' jurisdictions in England & Wales; a response rate of about 95%.
- ◆ The demographic profile of fatalities reported by coroners to the np-SAD remains consistent with previous reports. The majority of cases were males (74%), under the age of 45 years (71%), and White (95%).
- ◆ The principal underlying cause(s) of death were: accidental poisoning (64%); intentional self-poisoning (13%); and poisoning of undetermined intent (12%).
- ◆ Opiates/opioids (i.e. heroin/morphine; methadone; other opiates/opioid analgesics), alone or in combination with other drugs, accounted for the majority (69%) of all np-SAD cases.
- ◆ Heroin/morphine alone or in combination with other drugs, accounted for the highest proportion (45%) of fatalities, a slight decrease over the 2007 level of 46%.
- ◆ The highest rates of DRDs per 100,000 population aged 16 and over in 2008 were in the following jurisdictions: Brighton & Hove (20.7); Dumbarton (15.4); City of Manchester (11.0). Of these three areas, Brighton & Hove remained the same; the City of Manchester showed a small fall, whilst there was a significant decline in Dumbarton.
- ◆ The following jurisdictions reported significantly lower rates per 100,000 population aged 16 and over than in the previous year: Boston & Spalding (15.8 to 1.2; from 12 to one case); Blackpool & the Fylde (14.9 to 7.2, from 27 to 13 cases); Peterborough (10.8 to 3.1, from 14 to 4 cases); Newcastle-upon-Tyne (10.2 to 4.0, from 23 to 4 cases); Dumbarton (21.4 to 15.4, from 21 to 15 cases); Cornwall (8.7 to 3.2, from 38 to 14 cases); Bournemouth, Poole & Eastern Dorset (11.0 to 6.8, from 44 to 27 cases); and Wirral (6.4 to 2.4; from 16 to 6 cases).
- ◆ The following jurisdictions reported significantly higher rates per 100,000 population aged 16 & over than in the previous year: South Yorkshire Western (4.4 to 6.6, from 27 to 41 cases); and Bedfordshire & Luton (3.4 to 7.0, from 16 to 33 cases).
- ◆ Over the past decade, alcohol has contributed on average to one-third (32.3%) of all drug-related deaths notified to the np-SAD that meet the Programme's case criteria.
- ◆ In 2008, half (51%) of the deaths where both alcohol and a psychoactive drug were implicated, heroin was the drug mainly involved.
- ◆ On average, between 1999 and 2008, the 16-24 years age-group (designated as young people in the Government's drug strategy) accounted for 7.3% of all deaths notified to Programme. This proportion increased from 1.5% in 1999 to 9.1% in 2008.
- ◆ Where known, 66% of those aged 16-24 years had a history of drug abuse or dependence, including 'recreational' use. Twelve of the 135 who died in 2008 were known to inject.

- ◆ The principal drugs implicated in deaths of 16-24 year olds were heroin/morphine (38%), alcohol-in-combination (32%), and methadone (27%). Stimulants also accounted for a large proportion of cases: cocaine (16%), ecstasy-type drugs (8%); and amphetamine (7%).
- ◆ The proportion of deaths of drug users aged 50 years or more at the time of death with a known history of drug abuse or dependence notified to the np-SAD over the past decade rose from less than 0.1% in 1999 to 4.2%. The median age at death of those with a history of drug abuse was 29.7 years in 1999; by 2008 this had risen to 36.4 years.
- ◆ Two-thirds (65%) of older drug users died from accidental poisoning; mainly opiates, anti-depressants and hypnotics/sedatives. Suicides accounted for 14% of cases, chiefly intentional overdoses involving anti-depressants and/or hypnotics/sedatives or hanging. A further 11% were poisonings of undetermined intent.
- ◆ Methylamphetamine is being increasingly reported in both post mortem toxicology reports and recorded in the cause of death, typically with other stimulants. However, numbers remain small.
- ◆ The presence of piperazines in post mortem toxicology analysis was detected in only 3 cases in 2006; this number rose to 9 in 2007 and 13 in 2008; piperazines have been implicated in 16 of these deaths, usually in combination with stimulants and alcohol.
- ◆ Seven cases have been reported in the last 5 years where the death may be attributable to GBL. However, there does not appear to be an increase in these small numbers as a result of GHB having been made a Class C drug.
- ◆ The slimming aid DNP (2,4-Dinitrophenol) has caused at least one fatality in 2008, that of a middle-aged individual who died from multiple organ failure caused by dinitrophenol intoxication.

I Introduction

This report continues the series of annual reports published by the national programme on Substance Abuse Deaths (np-SAD). It is somewhat different to previous ones in that the 6-month surveillance reports on inquests have now been discontinued. Instead the annual

report focuses on deaths in the previous calendar year, as well as presenting information on emerging trends, and seeking to identify future potential issues that need monitoring.

Structure of the report

The first section of this report takes the form of a synthesis of academic journal articles and other reports published since the release of the last np-SAD annual report

The second section presents an annual review of information (including nil returns) received from coroners in England & Wales, Northern Ireland, the Isle of Man and Channel Islands, as well as the procurator fiscal for Dumbarton, the Scottish Crime and Drug Enforcement Agency (SCDEA), and the General Register Office for Northern Ireland (GRONI) via the Northern Ireland Statistics and Research Agency, on 1,952 drug-related deaths that actually occurred in 2008. Since there are differences in legal and coronial systems, data collection methods, and database structures, it is only possible to examine some aspects of drug-related deaths at a UK level.

The third section looks at deaths reported to the np-SAD using the Programme's data collection form. Three aspects have been

selected for more detailed examination this year: (a) the role of alcohol in death; (b) drug-related deaths amongst young people aged 16 to 24 years; and (c) deaths of older drug users (aged 50 years or older). Finally, this section focuses on new drugs emerging.

The following section presents a profile of cases that occurred in England during 2008 that meet the definition used for monitoring the Government's drug strategy, as well as looking at trends over the past decade.

The last section provides a commentary on the deaths examined in the main body of the report as well as drawing various themes together that emerge from the literature reviewed and other analyses undertaken.

Three definitions of drug-related death are referred to in this report (see Appendix 2). These differences reflect distinctions in the nature and purpose of the data sources, and the types of cases covered.

Data collection

Since the time lapse between the date of death and the conclusion of inquest varies considerably from case to case, there will undoubtedly be further deaths in 2008 and deaths from additional coroners that are not covered by this report. However, these cases will be analysed in future reports. Information is presented separately for deaths in Wales (Annex AR7), Scotland (Annex AR8), and Northern Ireland (Annex AR9).

There may be higher rates in some areas compared with previous reporting periods because of Programme staff visiting coroners' offices to collect data themselves, or because of bilateral checks between the np-SAD and local confidential inquiries on case coverage. This has led to more cases being identified

than hitherto, and subsequently being reported. This is one way in which the Programme attempts to monitor the quality and coverage of case reporting. In many areas that use Mountain Software¹ there are difficulties in readily identifying relevant cases retrospectively since the text search facilities are not presently available for the key fields that would help selection. Other sources are available in some coroner's offices to identify cases, e.g. diaries and ledgers with details of individual cases.

¹ IRIS (formerly Mountain Software) provide a bespoke computer package for coroners comprising management tools, and the generation of statistical forms and other reports, including the form used to submit information to np-SAD. Most coroners in England and Wales use this software.

Ensuring the quality, accuracy and comprehensiveness of drug-related death data

Introduction

The np-SAD Programme has been giving consideration as to how it can further improve both the quality of information collected and also to establish if all relevant cases are being identified and notified. By establishing the extent to which cases are being correctly identified, it will be possible to extrapolate from the deaths notified by participating areas to the expected number of cases if all coroners were reporting all cases, thereby providing a much more precise estimate of drug-related deaths (DRDs) for policy and intervention planning.

Methodology

For this study, completed inquests for deaths occurring in 2007 and which are available in coroners' offices have been chosen for examination. A statistically representative sample has been drawn for the quality assurance aspect based on cases reported by coroners in England and Wales. To ascertain the accuracy of case identification and reporting, a sample of 10% of records was drawn randomly from all completed inquests files for each selected coroner's area.

Geographical representativeness is based on selecting one coroner's area in each of the ten Strategic Health Authority areas in England and in the four Substance Misuse Advisory Regional Team areas in Wales.

Preliminary findings

Quality of information

At the time of the writing, a total of 9 out of the 14 coroners' areas selected for study have been visited. Information on 125 DRDs reported to np-SAD has been compared with the coroners' records in respect of its content and quality. Three issues emerged in relation to completeness of information and data quality.

A high proportion of demographic information was not recorded on the death form submitted to np-SAD. Most of the required information on decedents was available in various documents which are found in the case files: the

Inquisition, witness statements, hospital records, and GP letters.

Many forms have either incomplete or partial information on toxicological results. In most cases, the levels of drugs found were not transferred from the analytical section of the forensic reports to the np-SAD form.

Some forms submitted did not include information on the medical, psychological or substance use history of the individual. This can be often found in the documents available within the case file; typically the same documents as identified above. However, such information can be time-consuming to extract. It is also noted that prescribed medications listed in GP or hospital records are often not correctly detailed on the data collection form.

Identification of cases

Attempts have been to identify if there is any under- or over-reporting of cases. So far, no instances of over-reporting have been found. However, files on 267 completed inquests on all types of death have been examined in the same 9 areas to determine the extent of under-reporting. Twelve of these 267 (4.5%) deaths that were not reported to the np-SAD could have met the Programme's case criteria.

A more detailed examination of all the examples identified as not having been reported to the Programme although meeting the case criteria will help to identify the potential reasons to why these cases were not reported. Further investigations will be undertaken with those responsible for notifying cases to establish these factors more concretely. Once all the areas have been visited, a more in-depth and extensive analysis will be undertaken and written up.

Next steps

The likely outputs of this study will include: a better understanding of what information is available in coroners' inquest files, as well as its completeness and quality, and thus what can be entered on the np-SAD data collection form. Detailed guidance can be offered to coroners and their staff as to what documents within the case files are likely to yield the

information required by the Programme. Identification of the reasons why particular types of drug-related deaths are not being identified and/or notified as relevant to the Programme will provide an opportunity to draw up detailed guidance on when to report cases to the np-SAD. In turn this will improve the comprehensiveness of case coverage, and allow for more accurate statistics to be produced. Similar recommendations have been recently made by Baldacchino et al (2009) in respect of Scottish data sources.

Acknowledgements

We are very grateful for the support given to the Programme by the Coroners' Society in the setting up of this study, and to the individual coroners who have granted access to their records for the purposes of this research. The invaluable assistance of their staff is also acknowledged.

II Selective literature review on drug-related mortality (2008-9)

Introduction

A number of recent studies on drug abuse-related mortality have provided examples of how these studies may play a role in improving surveillance, informing treatment provision, and in preventing premature deaths. Relevant studies, published since the last annual report, were identified by a search of databases (including Embase, Medline, PsycINFO, and ToxNet) and the Internet using combinations of key words such as “mortality”, “death”, “fatality”, “drug”, “drug-related”, “poisoning” and “overdose”, as well as scanning the

relevant professional media. A selection of these studies is outlined below.

There may be differences between countries in terms of definitions, social contexts, regulatory environment, and healthcare provision that need to be borne in mind when considering these findings to the United Kingdom context. Nevertheless, it is interesting to note that death is one of the major issues associated with drug use. Whilst it may not be possible to compare studies directly, it is useful to examine them in order to inform both research and practice.

Studies from North America and the rest of the world

Recent reports from North America have revealed a significant increase in the number of poisoning deaths associated with methadone and psychoactive prescription drugs. Between 1999 and 2005, the rate of increase in methadone-related deaths is seven times that of the rate of increase in all poisoning deaths (US SAMHSA, 2009). This significant increase can be associated with a corresponding rise in the quantity of diverted methadone (US General Accountability Office, 2009), suggesting the need for tighter control and more rational prescribing of methadone.

Some predictors of methadone-related fatalities have also been identified. These include: high dose prescription; insufficient patient education on the mechanism of methadone action and dangers of drug combinations; prescription by non-specialist practitioners; recent discharge from prison; and a history of emergency care for soft tissue infections. One of such studies was a New Mexico study of recently released illicit drug users has revealed that drug-related death was thrice as likely to occur within two weeks of prison release compared to ten weeks after discharge; victims were more likely to have ingested opiates and/or sedative-hypnotics (Krinsky et al., 2009). Another study of predictors of fatality was an emergency department study of injecting drug users (IDUs) which revealed that premature mortality was strongly associated with emergency

treatment for soft tissue infections (Binswanger et al., 2008).

There are suggestions that the number of deaths due to prescription drugs has intensified between 2001 and 2005; young adults have been identified as an at-risk group in this pattern of fatality (National Drug Intelligence Center, 2009). Also worrying was a report of the death of five teenagers who deliberately ingested large doses of dextromethorphan obtained from internet sources for recreational purposes (Logan et al., 2009). Furthermore, polydrug use-related fatality is also becoming more prominent in rural Virginia and West Virginia where an increase of 300% was observed between 1997 and 2004 (Wunsch et al., 2009; Hall et al., 2008).

The pattern of drug fatalities reported from Canada was somewhat different. Cocaine and other stimulants appear to be the most frequently implicated drugs in British Columbia (Buxton et al., 2009).

There are new findings on the procedure for conducting autopsies and reaching decisions on undetermined cause of death. One of such studies revealed that decedents whose cause of death was undetermined were five times more likely to have a history of illicit drug use (Gruszecki et al., 2008). Another study has showed that there was no correlation between serum drug levels and the mechanism of drug

toxicity in cocaine-related deaths. In particular, there was no statistically significant difference in cocaine or benzoylecgonine concentrations between cases certified as poisonings and those certified as aggravating underlying diseases (Graham and Hanzlick, 2008). This finding strongly suggests that cocaine-related fatality is idiosyncratic. This finding is consistent with that of an Australian study of mortality associated with amphetamine class drugs that reported no significant correlation between blood concentration and cause of death (Pilgrim, 2009). The main causes of death in the Australian study were cerebral haemorrhage and heart disease associated with chronic use of methylamphetamine and/or MDMA toxicity. There were no deaths from natural causes reported in this study.

There are strong opinions about the role of social inequalities in drug-related mortality. One of such studies is that of Najman et al (2008) where the relationship between drug-related mortality and social inequalities was examined. This 21-year time series study (1981-2002) revealed a parallel increase in social inequalities and drug-related deaths. A decline in drug death from 2000 was consistent with a corresponding decline in social inequalities in the Australian general

population. Overall, manual workers had a higher risk of DRD than non-manual workers.

Another Australian study examined mortality associated with naltrexone implants or methadone in a cohort of heroin dependents receiving either treatment. There was no significant difference in mortality between the two treatment groups. However, excess mortality was observed during the early phase of methadone treatment compared to naltrexone implants (Tait et al., 2008).

Two other studies were reported from Jordan and India. Hadidi et al (2009) published the first study on drug-related mortality in Jordan. Using data from post-mortem forensic pathology reports, the most frequently implicated substance was alcohol followed by heroin/morphine and benzodiazepines. Amphetamine class drugs, cannabis and methadone were not implicated or detected in any fatalities. Solomon et al.'s (2009) two-year cohort study of Indian intravenous drug users (IDUs) showed a mortality rate of 4.25 per 100 person-years, and an overall Standardised Mortality Ratio (SMR) of 11.1. The SMR for IDUs who were HIV-positive was 23.9.

Studies from Europe

Recent studies in Europe focused on prevalence and trends, infection, adverse drug reaction, toxicology and treatment outcome. Vincente et al (2009) have reported on a rebound in the number of overdose deaths across member states of the EU between 2003 and 2005, following a sustained decline between 2000 and 2002. Lyons et al (2008) reported on a similar trend in the number of drug-related deaths (DRDs) in Ireland with an approximately three-fold increase between 1998 and 2005. These deaths occurred mainly in males aged 20-40 years, with polysubstance poisoning the predominate cause of death over the eight-year period of study. Another Irish study reported on six cases of suspected wound botulism between November and December 2008 among Dublin IDUs. The study identified the main risk factor for such infection as subcutaneous or intramuscular injection (Barry et al., 2009). Such infections are known to result in premature deaths among addicts.

Fatal adverse drug reactions (FADRs) were the subject of an Italian study (Leone et al

2008) where two categories of ADRs were examined – suspected ADRs that caused death and ADRs that contributed to death. While this study covered all categories of prescribed drugs, especially drugs of wide usage with a narrow therapeutic range, the study underscored the need to improve rational prescribing through continuing professional development. This observation should also apply to prescribers of psychoactive drugs.

The use of toxicological findings in death as a marker for drug-related diagnoses has been suggested. A Finnish study (Lahti et al., 2009) has demonstrated that specific drug-related diagnoses could be made from cause of death data on cannabis, opiates and amphetamine-related deaths.

A large Norwegian cohort study of opiate dependents has again demonstrated how opioid maintenance treatment can reduce mortality risks. This study also revealed the influence of age on mortality risks; younger patients were at greater risk of fatal drug

overdose before entering treatment and older patients after leaving treatment (Clausen et al.,

2009). This risk profile is very useful in developing overdose prevention programmes.

British studies

Recent mortality studies published in the UK focused on data completeness, suicide risks, treatment outcome and prevention of fatal overdose. Baldacchino et al (2009) examined the completeness of data available from case files of deceased individuals in contact with services 6 months prior to drug deaths in Scotland during 2003. They observed as follows: Socio-demographic details were reported much more frequently than medical problems; medical and psychiatric history was recorded in only 12%, blood-borne viral status in 17% and life events in 26%. The authors concluded that relevant data were missing in the case files reviewed, and suggested that additional training to improve accuracy and completeness of datasets.

In a review of suicide risk among young people, Webb (2009) observed significant gender differences in comorbidities associated with suicide among substance misusers, with a greater prevalence of depressive symptoms and psychological distress among female substance misusers.

Hurst et al (2009) examined the pattern of mortality in treated drug users reported to the national drug treatment monitoring system (NDTMS) between 2003 and 2008. They observed a significant difference between drug-related death cases and natural death cases data in age at death, with DRD cases dying about five years earlier, on average. Furthermore, injecting drug use was observed to be linked with deaths from heart conditions.

A Scottish study examined mortality rates in a 10-year retrospective cohort of patients prescribed methadone. Crude mortality rate in the cohort was 8%. Over use of methadone (defined as the length of treatment being shorter than the total coverage of the prescribed prescriptions) (adjusted hazard ratio 1.67, 95% confidence interval 1.05 to 2.67), history of psychiatric admission (2.47, 1.67 to 3.66), and increasing comorbidity were all associated with an increase in all cause mortality. History of psychiatric admission (adjusted hazard ratio 2.41, 1.25 to 4.64), and history of prescription of benzodiazepines (4.35, 1.32 to 14.30) were significantly associated with mortality in this group (McCowan et al., 2009).

Hawton et al (2009) examined the effect of the 2005 withdrawal of co-proxamol on analgesic prescribing and poisoning mortality in England and Wales). They identified an overall decrease of about 59% in prescribing of co-proxamol in the post-intervention period, 2005-2007. However, prescribing of some codeine-containing analgesics increased significantly during this time. These changes were associated with a major reduction in deaths involving co-proxamol compared with the expected number of deaths. Conversely, there was no statistical evidence for an increase in deaths involving either other analgesics or other drugs. This finding suggests that the withdrawal of co-proxamol was effective in preventing associated fatal poisoning.

III Drug-related deaths in the United Kingdom, 2008

1. Numbers of deaths reported

Notifications of 1,490 drug-related deaths occurring in 2008 that meet the np-SAD case criteria (see Appendix 2) were received by the np-SAD. Responses (including nil returns) were received from a total of 109 out of 115 coroners' jurisdictions in England and Wales. This is a coverage rate of about 95%. In addition, the coroners in Northern Ireland, Guernsey, Jersey and the Isle of Man contributed data analysed in this Annual Report, as well as one Procurator Fiscal in Scotland.

Furthermore, the Scottish Crime & Drug Enforcement Agency (SCDEA) and the Northern Ireland Statistics & Research Agency (NISRA) provided data reported to them for deaths in the period under examination. These deaths do not represent the full number of drug-related deaths in the UK since not all deaths are reported to the SCDEA (see next paragraph), and further inquests remain to be completed in England, Wales and Northern Ireland on deaths that occurred in 2008.

Deaths reported to the SCDEA by Scottish police forces are those which meet the definition used by the Association of Chief Police Officers (Scotland) and which excludes most suicides (see Appendix 2).

Table 1, together with Figures 1-3, takes into account data from the np-SAD as well as from the SCDEA and NISRA. Therefore the total number of drug-related deaths in the UK from the above sources is 1,952 in 2008, compared to 1,900 cases from the same sources in the equivalent period in 2007. This represents an increase of 2.7%. However, this increase is in part due to several more coroners' areas reporting to the Programme, a much improved flow of information from Northern Ireland, as well as to an actual increase in the number of cases notified, especially to the SCDEA.

A comparison of the areas which reported to np-SAD in both years shows that the number of cases by the time the database was finalised increased by about 8% (from 1,316 to

1,416 deaths). Furthermore the average number of cases notified per area increased from 12.7 for 2007 to 13.6 for 2008.

2. Demography

The majority (76%) of cases were male (Table 1). This proportion varied from 60% in Northern Ireland to 81% in Scotland. Where ethnicity was known, the majority were White (98%). Location of death was reported in all but 474 cases (24%) – mostly in Scotland. Where place of death was reported, about 71% died at a defined residential address (i.e. the deceased's home address or other private residential address), 20% died in hospital and 9% died elsewhere (e.g. in a public place). The proportion dying at a defined residential address ranged from 71% for np-SAD cases to 83% in Northern Ireland, and 100% in Dumbarton. The corresponding proportions for deaths in hospital ranged from 20% for np-SAD cases to 3% in Northern Ireland, and nil in Dumbarton.

The mean age at death was 39.1 years for all sources combined. However, there were differences between the individual datasets: np-SAD 38.6 years; SCDEA 34.2 years; and NISRA 41.3 years. There were also differences in the mean ages broken down by gender. Whereas the overall average age for males was 37.6 years compared to 43.7 for females (a difference of 6 years), the mean age for males in Scotland (34.3 years) was only slightly higher than that for females (33.8 years). However, in Northern Ireland the gap was considerably greater; the mean age for males was 42.0 years compared to 48.9 years for females. Similar patterns are exhibited by the median age and semi-interquartile ranges.

The above differences reflect distinctions in the nature and purpose of the data sources, the types of cases covered, and the volumes of cases dealt with by them. These variations also illustrate the limitations on making comparisons between them. Additional information for each of these registers is given below.

Table 1: Demographic variables for drug-related deaths, UK, 2008

Variable	Category	Number (%)
Total		1,952 (100.0)
Gender	Male	1,484 (76.0)
	Female	468 (24.0)
Age-group (years)	Under 15	1 (0.1)
	15-24	216 (11.1)
	25-34	596 (30.5)
	35-44	650 (33.3)
	45-54	278 (14.2)
	55-64	118 (6.0)
	Over 64	93 (4.8)
Location of death	Defined residential address	1,057 (54.1)
	Hospital	291 (14.9)
	Other	131 (6.7)
	Not known	474 (24.3)

Figure 1: Drug-related deaths by age and gender, UK, 2008

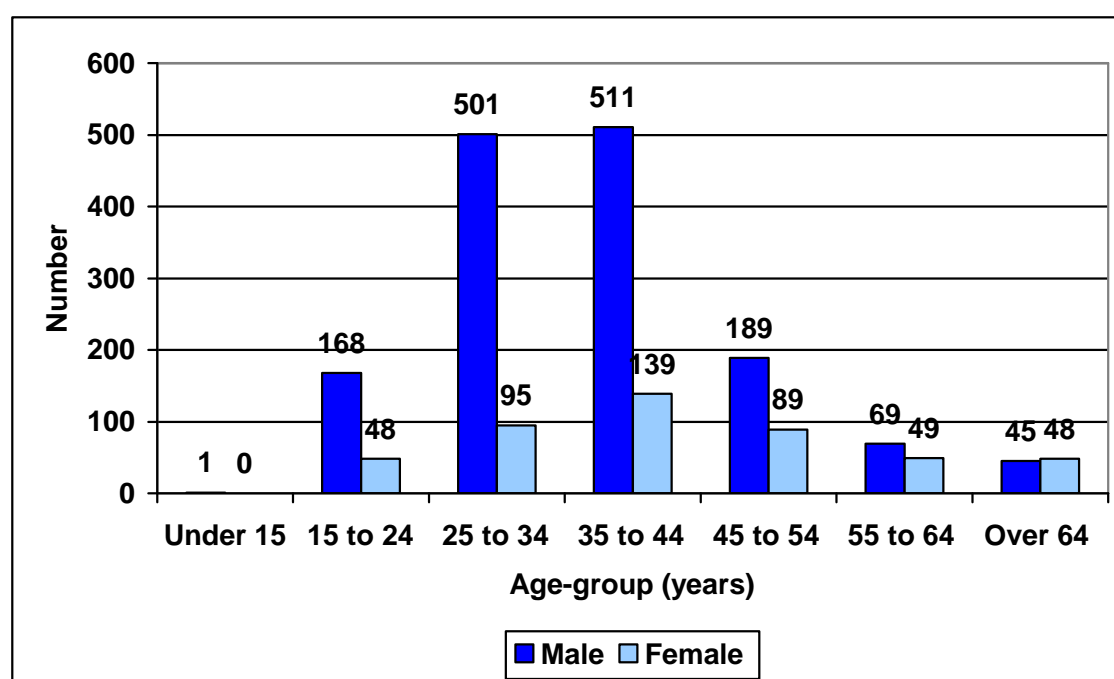
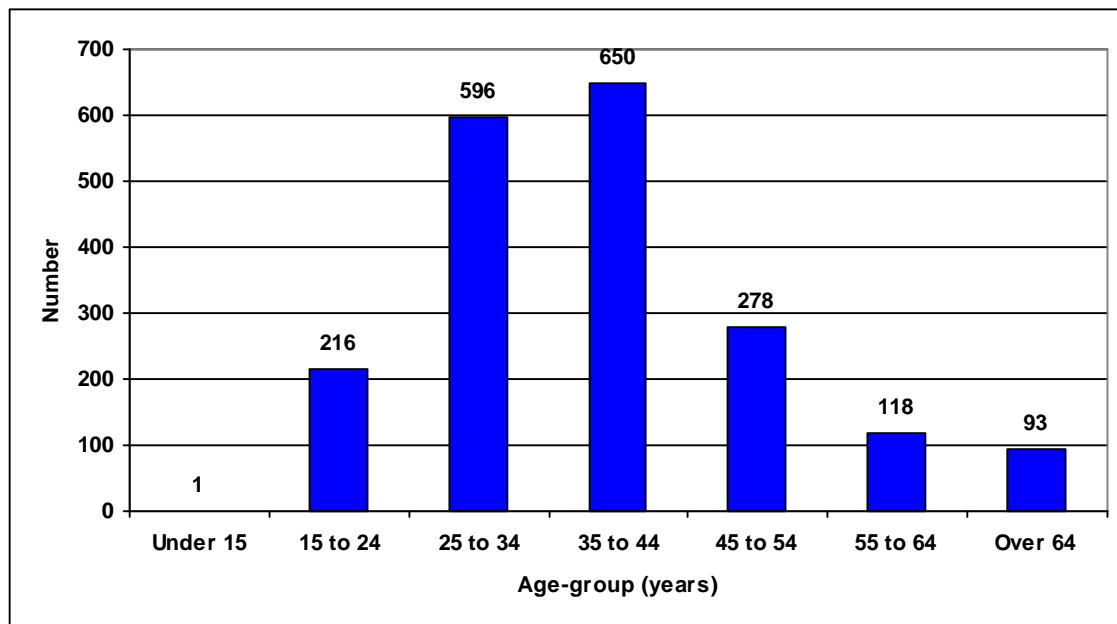
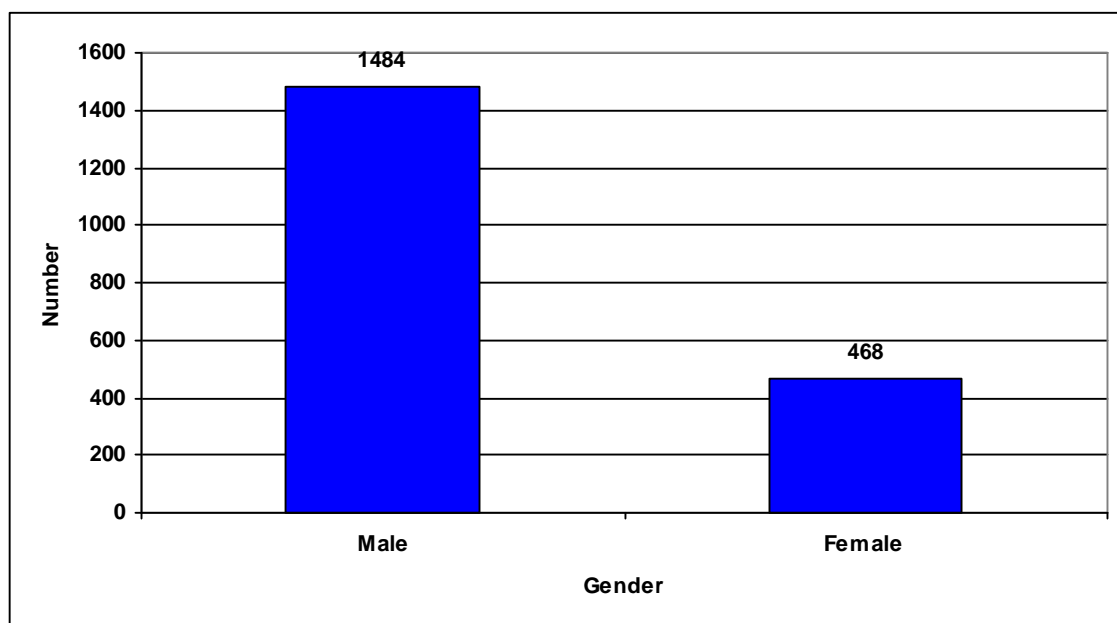


Figure 2: Drug-related deaths by age, UK, 2008**Figure 3: Drug-related deaths by gender, UK, 2008**

IV np-SAD cases, 2008

Demographic profile

1. Demography

Notifications of 1,490 drug-related deaths occurring in 2008 were received by the np-SAD that met the Programme's case criteria (see Appendix 2). Responses (including nil returns) were received from a total of 109 out of 115 coroners' jurisdictions in England and Wales. This is a coverage rate of about 95%. In addition, the coroners in Northern Ireland, Guernsey, Jersey and the Isle of Man contributed data analysed in this Annual Report, as well as one Procurator Fiscal in Scotland.

The majority (74%) of cases were male (Table 2). The median age at death was 38.6 years (semi-interquartile range = 7.7) (Figures 4-6). The majority (71%) of cases were under 45 years. Where ethnicity was known, the majority were White (95.3%); the rest were Black (1.3%), Asian (1.9%), and Other (0.9%). Half (50%) were unemployed. There were similar proportions living alone (40%) or with others (46%), but 6% were of no fixed abode.

Table 2: Demographic variables for drug-related deaths, np-SAD cases, 2008

Variable	Category	Number (%)
Total		1,490 (100.0)
Gender	Male	1,109 (74.4)
	Female	381 (25.6)
Employment status	Unemployed	742 (49.8)
	Employed	405 (27.2)
	Childcare/houseperson	33 (2.2)
	Student	24 (1.8)
	Retired/sickness/invalidity	170 (11.4)
	Other	11 (0.7)
	Not known	105 (7.0)
Living arrangements	Alone	598 (40.1)
	With others	678 (45.5)
	No fixed abode	82 (5.5)
	Other	65 (4.4)
	Not known	67 (4.5)

2. Location of death

Location of death was reported in all but eleven cases. About 71% died at a defined residential address (i.e. the deceased's home address or other private residential address), 20% died in hospital and 9% died elsewhere (e.g. in a public place).

3. Underlying cause(s) of death (Annex AR1)

To enable comparison with various national and international datasets all causes of death have been coded according to the

International Classification of Diseases (ICD-10). This is an international standard for the classification of diseases and health-related problems published by the World Health Organisation (1992). The proportions of ICD-10 categories of underlying cause(s) of death were as follows:

- Accidental poisoning (X40-X47): 63.9%
- Intentional self-poisoning (X60-X67): 12.7%
- Poisonings of undetermined intent (Y10-Y15): 12.2%
- Other (e.g. natural causes, drowning, hanging, unascertained): 11.2%

Figure 4: Drug-related deaths by age and gender, np-SAD cases, 2008

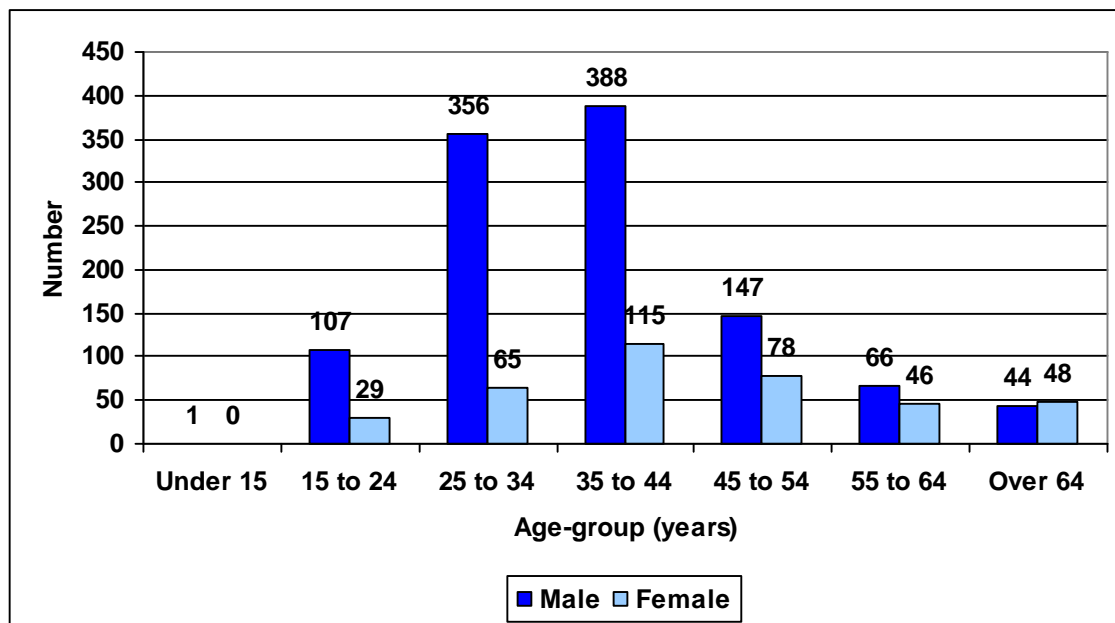


Figure 5: Drug-related deaths by age, np-SAD cases, 2008

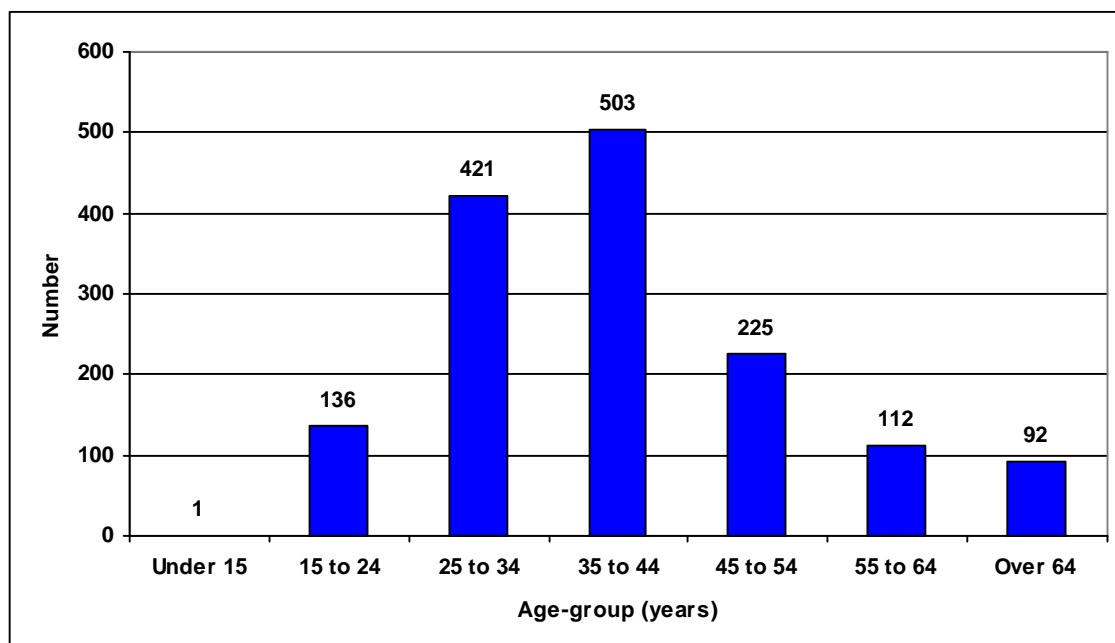
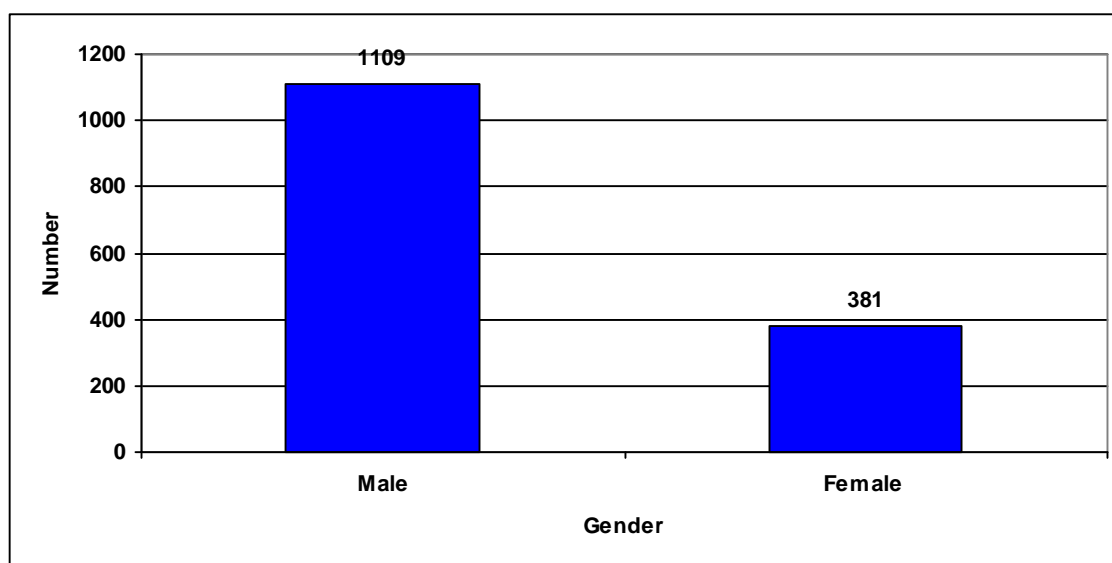


Figure 6: Drug-related deaths by gender, np-SAD cases, 2008

4. Manner of death

The 'intentionality' of deaths based on the coroner's verdict and/or other additional information employing ICD-10 codes is inadequate for informing interested parties as to whether certain categories of drug-related deaths can be prevented.

Whilst the 'cause' of death (as given in the preceding section) is concerned with the disease or injury responsible for the lethal sequence of events, the 'manner' of death explains how the cause of death arose, i.e. a natural or violent death. In accordance with best international practice, the following categories for 'manner of death' have been adopted: natural, accidental, suicidal, homicidal, undetermined, and unclassified/not specified.

Verdicts of 'dependence on drugs' or 'non-dependent abuse of drugs' are regarded as 'accidental'. The 'manner of death' is derived from information such as the verdict or 'finding', history of drug misuse or dependence, post mortem drugs, and other information; and is based on the interpretation of the death by np-SAD and clinical presentation/profile of the individual case. The results of this process for 2008 cases are as follows:

- Natural: 2.3%
- Accidental: 68.1%
- Suicidal: 15.6%
- Homicidal: 0.1%
- Undetermined: 13.5%
- Unclassified/not specified: 0.4%

Substances implicated in death

1. All substances

Psychoactive drugs were not directly implicated in 6% of cases ($n = 89$). Of the remaining 1,401 cases, the principal substances implicated were heroin/morphine (46%), alcohol in combination with other substances (32%), other opiates/opioid analgesics (21%), methadone (20%), anti-depressants (19%), hypnotics/sedatives (18%); and cocaine (13%).

Figure 7 takes into account data where one of the following drugs was known to be implicated: alcohol, anti-depressants, cocaine, ecstasy-type drugs, heroin/morphine, hypnotics/sedatives, methadone, or other opiates/opioid analgesics.

2. Single substances

The following substances, as the sole implicated drug, accounted for 587 (42%) deaths: heroin/morphine (16%), methadone (6%), other opiates/opioid analgesics (6%),

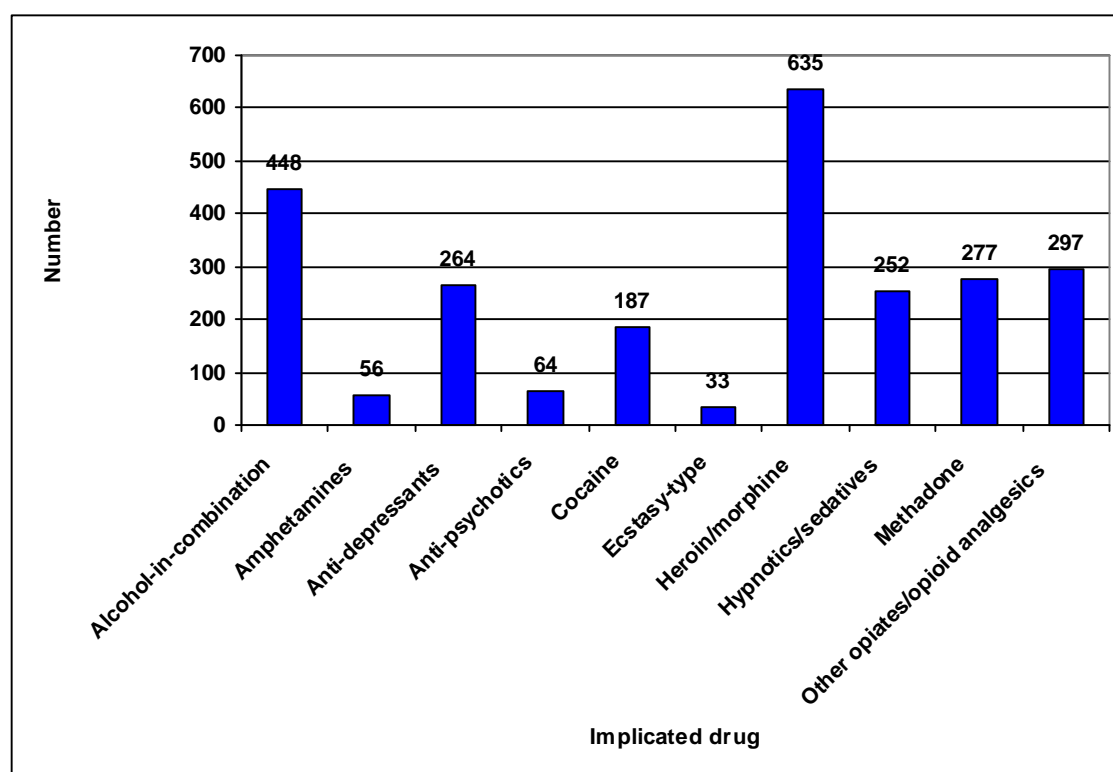
anti-depressants (5%), cocaine (3%), amphetamines (1.1%), hypnotic/sedatives (1.1%), anti-psychotics (0.9%), ecstasy-type drugs (0.9%), barbiturates (0.3%) anti-Parkinson's (0.2%) and cannabis (0.2%).

Table 3: Psychoactive substances implicated in death, np-SAD cases, 2008

Drug category	Number (%) of cases where no other substance was implicated	Number (%) of cases where drug was implicated
Total	1,401 (100.0)	1,401 (100.0)
Alcohol	-	448 (32.0)
Amphetamines	16 (1.1)	56 (4.0)
Anti-depressants	74 (5.3)	264 (18.8)
Anti-epileptics	8 (0.6)	27 (1.9)
Anti-Parkinson's	3 (0.2)	7 (0.5)
Anti-psychotics	12 (0.9)	64 (4.6)
Barbiturates	4 (0.3)	8 (0.6)
Cannabis	3 (0.2)	19 (1.4)
Cocaine	48 (3.4)	187 (13.3)
Ecstasy-type drugs	12 (0.9)	33 (2.4)
GHB	3 (0.2)	13 (0.9)
Heroin/morphine	227 (16.0)	635 (45.3)
Hypnotic/sedatives	16 (1.1)	252 (18.0)
Methadone	80 (5.7)	277 (19.8)
Other opiates/opioid analgesics	81 (5.8)	297 (21.2)

Notes: Column totals may sum to more than 100% since more than one substance may be implicated in a death. Not all cases had drugs directly implicated in death; these are excluded from this table.

Figure 7: Drug-related deaths by psychoactive drug implicated, np-SAD cases, 2008



3. Prescribed psychoactive drugs (Table 4)

Altogether, 840 np-SAD cases were reported to be receiving prescribed psychoactive drugs at the time of their death. Within this group, prescribed drugs of the following therapeutic

drug classes were reported: anti-depressants (50%); hypnotic/sedatives (41%); other opiate/opioid analgesics (21%); anti-psychotics (19%) and methadone (18%). 'Polypharmacy', i.e. multiple prescriptions of psychoactive drugs, occurred in 67% of these cases.

Table 4: Prescribed psychoactive medication, np-SAD cases, 2008

Drug category	Number (%) of cases on prescribed psychoactive medication	Number (%) of cases where same drug was implicated in death
Total	840 (100.0)	
Amphetamines	2 (0.2)	0 (0.0)
Anti-depressants	416 (49.5)	190 (45.7)
Anti-epileptics	81 (9.6)	16 (19.8)
Anti-psychotics	162 (19.3)	46 (28.4)
Heroin/morphine	22 (1.6)	17 (77.3)
Hypnotic/sedatives	340 (40.8)	112 (32.9)
Methadone	152 (18.1)	98 (64.5)
Other opiates/opioid analgesics	177 (21.1)	106 (59.9)

Note: Column totals may sum to more than 100% since more than one substance may be prescribed to an individual and more than one substance may be implicated in a death.

Associated risks

1. Prescribed psychoactive drugs

Of the 840 cases prescribed psychoactive drugs at the time of their death, 54% had those same drugs, alone or in combination with other drugs, implicated in their death (Table 4). This proportion ranged from 7% for anti-Parkinson's to 77% for heroin/morphine.

The following paragraphs take a closer look at the relationship between deaths and the involvement of prescribed medication. This approach is to be distinguished from that in Table 4, which only looks at those on prescribed medication.

1.1 Methadone

Methadone, alone and in combination with other drugs, was implicated in 277 cases. Of these, 65% may have obtained methadone from illicit sources, compared to 35% who were known to be receiving prescribed methadone prior to their death (Percentage Ratio: PR = 1.8, 95% CI = 1.5 - 2.2).

Methadone alone was implicated in 80 cases. Of these, 66% may have obtained the drug from illicit sources, compared to 34% who were known to be receiving prescribed

methadone, compared to (PR = 1.9, 95% CI = 1.4 - 2.8).

Overall, it appears that methadone-related deaths are more likely to arise from illicit than licit methadone.

1.2 Anti-depressants

Anti-depressants, alone and in combination with other drugs, were implicated in 308 cases. Of these, 72% were known to be receiving prescribed anti-depressants at the time of their death, compared to 28% who may have used drugs prescribed for others (PR = 2.6, 95% CI = 2.1 - 3.2).

Anti-depressants alone were implicated in 74 cases. Of these, 77% were known to be receiving prescribed anti-depressants, compared to 23% who may have used drugs prescribed for others (PR = 3.4, 95% CI = 2.2 - 5.2).

Those receiving prescribed anti-depressants were significantly more likely to have that class of drug implicated in their death, either in combination or as the sole drug, compared to those who had apparently used drugs prescribed to others.

1.3 Other opiates/opioid analgesics

Other opiates/opioid analgesics (e.g. dihydrocodeine, dextropropoxyphene) alone and in combination with other drugs, were implicated in 297 cases. Of these, 62% may have obtained the drug by other means, compared to the 38% who were known to be receiving prescribed opiate/opioid analgesics prior to their death (PR = 1.8, 95% CI = 1.5 - 2.1).

Other opiate/opioid analgesics alone were implicated in 81 cases. Of these, the drugs were apparently obtained by other means in 64% of cases, compared to being prescribed in 36% of cases (PR = 1.6, 95% CI = 1.2 - 2.2).

1.4 Hypnotics/sedatives

Hypnotic/sedatives, alone and in combination with other drugs, were implicated in 252 cases. Of these, 56% may have obtained them illicitly, compared to the 44% who were known to be receiving a prescription for this class of drug (PR = 1.3, 95% CI = 1.0 - 1.5).

Sixteen cases had hypnotic/sedatives alone implicated in their death, of whom 13 (81%) had received the drug on prescription, compared to 3 (19%) who may have obtained it illicitly (PR = 4.3, 95% CI = 1.5 - 12.3).

In summary, there was a tendency that those prescribed hypnotics/ sedatives were more likely to have that class of drug implicated in fatality if only one substance was implicated.

2. Gender and underlying cause(s) of death

Males were significantly more likely than females to die of accidental poisoning (68% vs. 52%) (PR = 1.3, 95% CI = 1.2 - 1.4).

Females, by contrast, were significantly more likely than males to die of intentional self-poisoning (23% vs. 9%) (PR = 2.5, 95% CI = 1.9 - 3.2), and poisoning of undetermined intent (16% vs. 11%) (PR = 1.5, 95% CI = 1.1 - 1.9).

3. Gender and manner of death

A similar pattern was revealed in respect of manner of death. Males were more likely than females to die an accidental death (73% vs. 54%) (PR = 1.3, 95% CI = 1.2 - 1.5).

Conversely, females were more likely than males to die of suicide (26% vs. 12%) (PR = 2.1, 95% CI = 1.7 - 2.7), or a death where the manner was undetermined (17% vs. 12%) (PR = 1.4, 95% CI = 1.1 - 1.8).

4. Gender and drug implicated in death

The pattern of drug-specific fatality is somewhat different in male and female cases.

Among males, the most frequently mentioned drugs were: heroin/morphine (51%); alcohol-in-combination (33%); methadone (20%), other opiates/opioid analgesics (18%); hypnotic/sedatives (16%); cocaine (15%); and anti-depressants (13%).

Furthermore, there is a higher proportion of cases of drug-specific fatality among males compared to females in respect of amphetamine, cannabis, cocaine, ecstasy-type drugs and GHB.

Among female cases, the most frequently mentioned drugs were: anti-depressants (33%); other opiates/opioid analgesics (34%); alcohol-in-combination (30%); heroin/morphine (28%); hypnotic/sedatives (23%); and methadone (18%).

Amongst females, there is a greater proportion of cases involving anti-depressants, hypnotics/sedatives, and other opiates/opioid analgesics.

5. Age and underlying cause(s) of death

Those aged less than 45 years were more likely than older cases to die of accidental poisoning (72% vs. 44%) (PR = 1.6, 95% CI = 1.5 - 1.8).

Those aged 45 years or over, by contrast, were more likely than younger cases to die of intentional self-poisoning (31% vs. 6%) (PR = 5.9, 95% CI = 4.2 - 7.5), and poisoning of undetermined intent (17% vs. 11%) (PR = 1.5, 95% CI = 1.2 - 2.0).

6. Age and manner of death

Cases aged less than 45 years were more likely than older cases to die accidentally (77% vs. 46%) (PR = 1.7, 95% CI = 1.5 - 1.9).

Conversely, those aged 45 years or over were more likely than younger cases to die intentionally (34% vs. 8%) (PR = 4.0, 95% CI = 3.1 - 5.1), or in a manner that was

undetermined (18% vs. 12%) (PR = 1.5, 95% CI = 1.1 - 1.9).

7. Age and drug implicated in death

In cases aged less than 45 years, heroin/morphine (53%) was the most frequently mentioned drug contributing to fatality. In those aged 45 years and over, other opiates/opioid analgesics (36%) were mentioned most often (Table 5).

Table 5: Age and psychoactive drug implicated in death, np-SAD cases, 2008

Age-group (years)	Number (%) where drug was implicated	Drug category (alone or in combination) most frequently implicated in each age group
All ages	1,401 (100.0)	Heroin/morphine (45.3%)
Under 15	1 (0.1)	Heroin/morphine & alcohol (1)
15–24	128 (9.1)	Heroin/morphine (39.6%)
25–34	391 (27.9)	Heroin/morphine (59.8%)
35–44	485 (34.6)	Heroin/morphine (50.9%)
45–54	204 (14.6)	Heroin/morphine (34.8%)
55–64	107 (8.0)	Other opiates/opioid analgesics (42.1%)
65 & over	85 (6.1)	Other opiates/opioid analgesics (49.4%)

Drug abuse/dependence

Cases reported to np-SAD with a history of drug abuse/dependence or recreational drug use ($n = 805$) were compared to those without such a history ($n = 386$) on the following variables: demography, location of death, underlying cause(s) and manner of death. Two hundred and ninety-nine np-SAD cases (20%) were reported as “not known” with respect to history of drug abuse/dependence. These cases were excluded from further analysis.

1. Demography

In comparison with non drug abusers (NDAs: 62%), drug abusers/dependents (DAs: 80%) were more likely to be male ($PR = 1.3$, 95% $CI = 1.2 - 1.4$) and less than 45 years of age, 83% compared to 47% ($PR = 1.9$, 95% $CI = 1.6 - 2.0$). The median age at death for DAs was 36.4 years (semi-interquartile range = 6.0), while that for NDAs was 46.3 years (semi-interquartile range = 13.1) (Mann-Whitney $U = 93,999.5$ $p < 0.0005$).

2. Location of death

There was no significant difference between DAs (69%) and NDAs (74%) with respect to the location of their death. In both groups the majority died at home or in a defined

residential address. Hospital deaths accounted for a similar proportion of both DA (21%) and NDA (20%) deaths. A higher proportion of DAs (9%) died in temporary accommodation or in public places than NDAs (7%). However, this difference was not statistically significant.

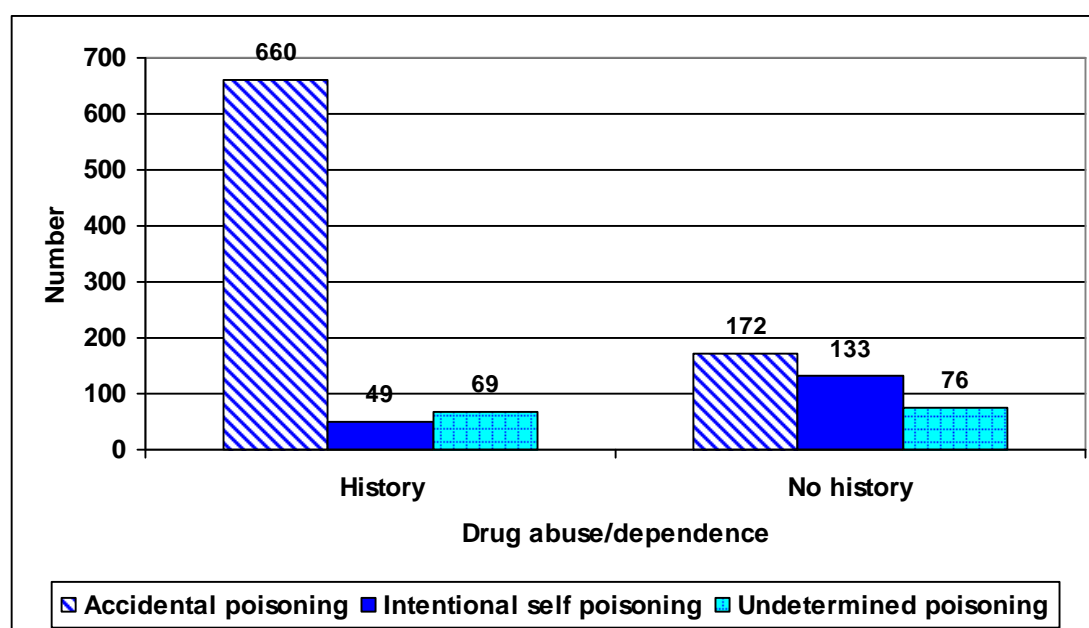
3. Underlying cause(s) of death

DAs were more likely than NDAs to die of accidental poisoning (78% vs. 42%) ($PR = 1.8$, 95% $CI = 1.6 - 2.1$; – Figure 8). NDAs, by contrast, were more likely than DAs to die of intentional self-poisoning (32% vs. 3%) ($PR = 9.5$, 95% $CI = 6.4 - 14.2$), and poisoning of undetermined intent (18% vs. 8%) ($PR = 2.3$, 95% $CI = 1.7 - 3.2$).

4. Manner of death

A similar pattern is exhibited with regard to manner of death. DAs were more likely than NDAs to die an accidental death (82% vs. 45%) ($PR = 1.8$, 95% $CI = 1.6 - 2.1$). Conversely, NDAs were more likely than DAs to die of suicide (35% vs. 6%) ($PR = 5.7$, 95% $CI = 4.2 - 7.7$), or a death where the manner was undetermined (20% vs. 9%) ($PR = 2.3$, 95% $CI = 1.7 - 3.1$).

Figure 8: Principal underlying cause(s) of death by drug abuse/dependence history, np-SAD cases, 2008



np-SAD drug-related deaths in 2007 reported in 2008/9

A further 321 inquest reports were received from coroners in 2008/9 on deaths occurring in 2007, giving an updated total number of deaths in 2007 of 1,863 (excluding data from the Scottish Crime & Drug Enforcement Agency). Demographic details and a summary of principal drugs implicated in death are presented below. The distribution of deaths according to coroners' jurisdictions is summarised in Annex AR2.

1. Demography

The majority of cases were male (75%). The median age at death was 38.3 years (semi-interquartile range – 8.7), with 72% being under the age of 45 years. Where ethnicity was known, 95.0% were White, 2.1% Black, 1.7% Asian, and 1.23% Other. Approximately 50% of cases were unemployed and 42% of cases were living with others at the time of their death (Table 6). Where history of drug abuse or dependence was known, 66% had such a history.

Table 6: Demographic variables, additional 2007 np-SAD cases

Variable	Category	Number (%) of np-SAD cases in 2007 reported in 2008/9
Total		321 (100.0)
Gender	Male	242 (75.4)
	Female	79 (24.6)
Employment Status	Unemployed	161 (50.2)
	Employed	80 (24.9)
	Childcare/houseperson	7 (2.2)
	Student	8 (2.5)
	Retired/sickness/invalidity	33 (10.3)
	Other	1 (0.3)
	Not known	31 (9.7)
Living Arrangements	Alone	127 (39.6)
	With others	136 (42.4)
	No fixed abode	12 (3.7)
	Other	22 (6.9)
	Not known	24 (7.5)

2. Location of death

The majority of cases (69%) died at a defined residential address (e.g. the deceased's home address or other private residential address), 21% died in hospital and 10% died elsewhere (e.g. in a public place).

3. Underlying cause(s) of death

The proportions of ICD-10 categories of underlying cause of death were as follows:

- Accidental poisoning (X40-X47): 58.6%
- Intentional self-poisoning (X60-X67): 12.1%
- Poisoning of undetermined intent (Y10-Y14): 13.7%
- Other and unknown causes: 15.6%

4. Manner of death

The cause of death is considered to have arisen in these cases as follows:

- Natural: 2.2%
- Accidental: 63.9%
- Suicidal: 16.5%
- Homicidal: 1.2%
- Undetermined: 15.3%
- Unclassified/not specified: 0.9%

5. Substances implicated in death

The principal psychoactive substances implicated were: heroin/morphine (39%), alcohol in combination with other drugs (33%), anti-depressants (21%), hypnotics/sedatives (20%), other opiates/opioid analgesics (16%), methadone (15%) and cocaine 12%.

Heroin/morphine as the sole implicated drug accounted for 13% of deaths, anti-depressants 7%, methadone 5%, cocaine 4% and other opiates/opioids 4% of deaths. The breakdown of psychoactive substances implicated in death is given in Table 7.

Table 7: Psychoactive substances implicated in death, additional 2007 np-SAD cases

Drug category	Number (%) of cases where no other substance implicated	Number (%) of cases where drug implicated
Total	293 (100.0)	293 (100.0)
Alcohol	-	97 (33.1)
Amphetamines	7 (2.4)	17 (5.8)
Anti-depressants	21 (7.2)	62 (21.2)
Anti-epileptics	4 (1.4)	9 (3.1)
Anti-Parkinson's	0 (0.0)	3 (1.0)
Anti-psychotics	3 (1.0)	13 (4.4)
Barbiturates	0 (0.0)	2 (0.7)
Cannabis	2 (0.7)	7 (2.4)
Cocaine	13 (4.4)	36 (12.3)
Ecstasy-type drugs	4 (1.4)	12 (4.1)
GHB	2 (0.7)	7 (2.4)
Heroin/morphine	39 (13.3)	114 (38.9)
Hypnotics/sedatives	4 (1.4)	57 (19.5)
Methadone	14 (4.8)	44 (15.0)
Other opiates/opioid analgesics	12 (4.1)	47 (16.0)

Note: Column totals may sum to more than 100% since more than one substance may be implicated in a death.

Changes between 2007 and 2008

The following section compares deaths in 2008 with those that occurred in 2007 (including updated data). The sources of information are the same for both years, i.e. cases reported using the np-SAD data collection form. Figures for 2008 (and 2007, to a lesser extent) can be expected to increase as further inquests are completed and the results notified to the Programme. The figures for 2008, therefore, cannot be compared directly with those in previous np-SAD publications.

1. Demographic characteristics

The figure reported on here for deaths in 2008 is 1490, a decrease of about 20% from the previous year (1,863). As more data are received for 2008 this gap will narrow. During the same time-frame last year, 1539 cases were reported.

Whilst there were small changes between 2007 and 2008, the demographic profile of cases remained stable with no significant changes in age, gender, ethnicity, and

employment status distributions. There was an increase in the proportion living with others (from 43% to 46%). A small increase was observed in the proportion of deaths occurring in residential premises (from 69% to 71%), and in the proportion of cases with a history of drug abuse or addiction (from 66% to 68%).

2. Underlying cause(s) of death

The proportion of accidental deaths increased from 62% in 2006 to 64% in 2007. Whilst intentional self-poisoning deaths and poisonings of undetermined intent remained unchanged (at 13% and 12% respectively), deaths from other causes fell from 13% to 11%.

3. Manner of death

The stable patterns observed for underlying cause(s) of death were echoed for the manner of death. The only change of note was a small increase in the proportion of undetermined deaths from 12% to 14% (PR = 1.1, 95% CI = 1.0 - 1.4).

4. Substances implicated in death

4.1 Multiple substances

Data on implicated drugs were available for 1,401 deaths occurring in 2008 (1,778 in 2007). Heroin/morphine remained the most frequently mentioned drug in 2008, having been implicated in 45% of deaths, slightly lower than in the previous year. There were decreases both in the number and proportion of mentions of most drugs, and for alcohol-in-

combination (Table 8). There were increases in the proportions accounted for by methadone, anti-psychotics and GHB

4.2 Single substance

There were significant changes between 2007 and 2008 in the proportions accounted for by individual drugs in fatalities related to a single substance, especially increases for heroin/morphine, other opiates/opioid analgesics, methadone and anti-depressants (Table 9).

Table 8: Changes in proportions of psychoactive substances implicated in multiple substance deaths, np-SAD cases, 2007-2008

Substance	2007 (N = 1,778)	2008 (N = 1,401)	Percentage Ratio (PR)	95% CI	Change (percentage points)
Alcohol-in-combination	36.4	32.0	1.1	1.0 - 1.3	- 4.4
Amphetamines	4.0	4.0	1.0	0.7 - 1.4	-
Anti-depressants	20.7	18.8	1.1	1.0 - 1.3	- 1.9
Anti-epileptics	2.5	1.9	1.3	0.8 - 2.1	- 0.6
Anti-Parkinson's	0.7	0.5	1.4	0.5 - 3.4	- 0.2
Anti-psychotics	3.8	4.6	1.2	0.9 - 1.7	+ 0.8
Barbiturates	0.6	0.6	1.1	0.4 - 2.7	-
Cannabis	3.5	1.4	2.6	1.5 - 4.3	- 2.1
Cocaine	15.4	13.3	1.2	1.0 - 1.4	- 2.1
Ecstasy-type drugs	3.2	2.4	1.4	0.9 - 2.1	- 0.8
GHB	0.8	0.9	1.2	0.6 - 2.5	+ 0.1
Heroin/morphine	46.2	45.3	1.0	0.9 - 1.1	- 0.9
Hypnotic/sedatives	20.5	18.0	1.1	1.0 - 1.3	- 2.5
Methadone	18.9	19.8	1.0	0.9 - 1.2	+ 0.9
Other opiates/ opioid analgesics	23.0	21.2	1.1	1.0 - 1.2	- 1.8

Note: Column totals may sum to more than 100% since more than one substance may be implicated in a death.

Table 9: Changes in proportions of psychoactive substances implicated in single substance deaths, np-SAD cases, 2007-2008

Substance	2007 (N = 1,778)	2008 (N = 1,401)	Percentage Ratio (PR)	95% CI	Change (percentage points)
Amphetamines	0.8	1.1	1.4	0.7 - 2.7	+ 0.3
Anti-depressants	4.4	5.3	1.2	0.9 - 1.6	+ 0.9
Anti-epileptics	0.5	0.6	1.1	0.4 - 2.9	+ 0.1
Anti-Parkinson's	0.0	0.2	-	-	-
Anti-psychotics	0.7	0.9	1.2	0.5 - 2.6	+ 0.2
Barbiturates	0.2	0.3	1.7	0.4 - 7.5	+ 0.1
Cannabis	0.3	0.2	1.3	0.3 - 5.5	- 0.1
Cocaine	3.0	3.4	1.1	0.8 - 1.7	+ 0.4
Ecstasy-type drugs	0.8	0.9	1.1	0.5 - 2.3	+ 0.1
GHB	0.3	0.2	1.3	0.3 - 5.5	- 0.1
Heroin/morphine	13.6	16.0	1.2	1.0 - 1.4	+ 2.4
Hypnotic/sedatives	1.3	1.1	1.2	0.6 - 2.2	- 0.2
Methadone	4.3	5.7	1.3	1.0 - 1.8	+ 1.3
Other opiates/ opioid analgesics	4.2	5.8	1.4	1.0 - 1.9	+ 1.6

5 Deaths per 100,000 population (Annex AR2)

5.1 Changes in jurisdictions with highest rates in 2007

The following jurisdictions reported annual drug-related death rates of 10/100,000 or higher in 2007: Dumbarton (21.4); Brighton & Hove (20.7); Blackpool & the Fylde (14.9); Boston & Spalding (13.9); City of Manchester (11.2); Bournemouth, Poole & Eastern Dorset (11.0); Peterborough (10.8); and Newcastle-upon-Tyne (10.2). Of these eight areas, Brighton & Hove remained unchanged, City of Manchester showed a small decrease, whilst the other areas showed significant declines.

5.2 Changes in jurisdictions with lowest rates in 2007

The following jurisdictions reported annual drug-related death rates of less than 1 per 100,000 population in 2007: Ceredigion (0.00); City of London (0.00); Isles of Scilly (0.00); Powys (0.00); South Shropshire (0.00); Wiltshire (0.2); Gateshead & South Tyneside (0.4); Gloucestershire (0.6); North Yorkshire Western (0.7); Essex & Thurrock (0.7); and Stamford (0.9). Of these, the City of London, Isles of Scilly, and South Shropshire remained unchanged. Essex & Thurrock and Stamford were the only areas to show a decline. The

rest showed some increases, the most evident being: Gateshead & South Tyneside (+1286%); Gloucestershire (+202%); North Yorkshire Western (+ 101%); and Wiltshire (+100%).

5.3 Jurisdictions with highest rates in 2008

The following jurisdictions reported annual drug-related death rates higher than 10/100,000 in 2008: Brighton & Hove (20.7); Dumbarton (15.4); City of Manchester (11.0). Of these three areas, Brighton & Hove remained the same; the City of Manchester showed a small reduction, whilst there was a significant decline in Dumbarton.

5.4 Jurisdictions with lowest rates in 2008

The following jurisdictions reported annual drug-related death rates of less than 1/100,000 in 2008: Essex & Thurrock (0.1); Avon (0.1); North East Hampshire (0.3); West Manchester (0.3); Wiltshire (0.4); Coventry (0.4); Cardiff & Vale of Glamorgan (0.6); Mid & North Shropshire (0.6); North & East Cambridgeshire (0.7); and Sunderland (0.9). The following areas reported that there had been no relevant cases: Ceredigion; City of London; Guernsey; Great Yarmouth; Isles of Scilly; Stamford; and South Shropshire.

In-depth analysis

This section examines three issues in more detail in order to assist in describing the profile

of specific at-risk populations identified amongst death occurring in 2008.

Role of alcohol in death

Over the past decade, alcohol has contributed on average to one-third (32.3%) of all drug-related deaths notified to the np-SAD that meet the Programme's case criteria. This proportion varied between 26 and 39% between 1999 and 2008, standing at 30% in the latter year. The following analysis focuses on 2008 deaths where alcohol was implicated.

The demographic profile of this sample was similar to that of all drug-related deaths notified. Three-quarters (76%) were male, 77% were less than 45 years old, 53% unemployed, 8% were retired or on invalidity benefits. The median age at death was 38.9 years, almost identical to that for all np-SAD cases. Similar proportions of cases lived alone (38%) or with others (45%), whilst 8% were of no fixed abode.

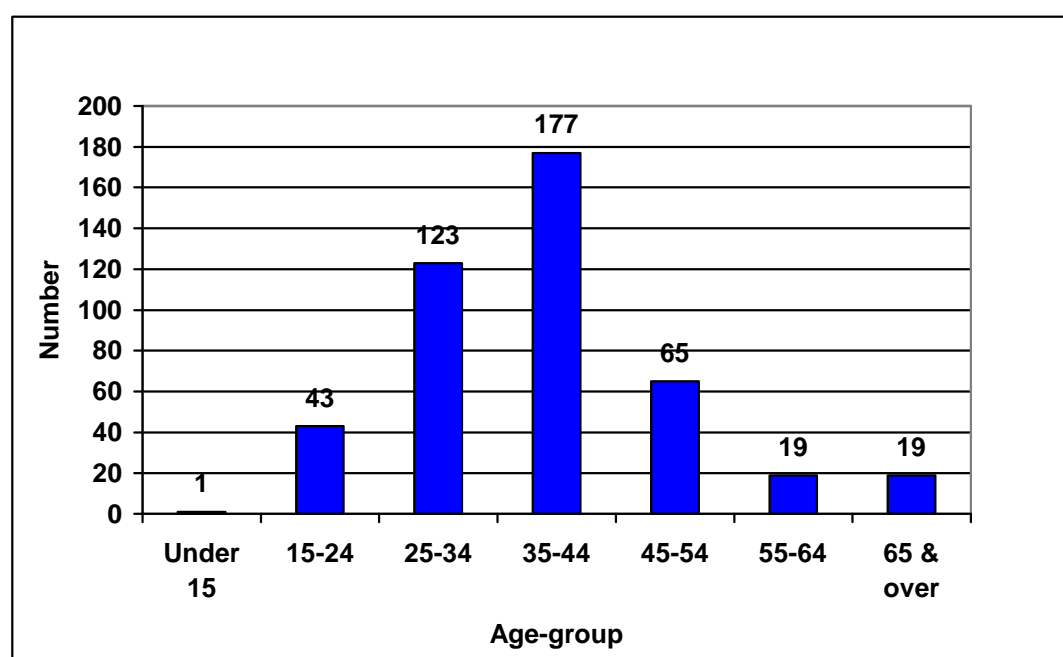
In 2008, half (51%) of the cases in this sample (n = 448) involved deaths from a combination of alcohol and heroin. Other combinations were: alcohol with hypnotics/ sedatives (24%), and alcohol with methadone 20%. A further 7% of cases involved alcohol, hypnotics/ sedatives and heroin, whilst 5% of cases had a

combination of alcohol, methadone and hypnotics/sedatives. Cocaine and alcohol were implicated in 14% of these alcohol-in-combination cases.

Most deaths occurred in the 35-44 years age-group, followed by the 25-34 years age-group (Figure 9). Two-fifths (42%) of cases were aged 35-44 and on prescribed medication, whilst 24% of cases were aged 25-34 years and taking prescribed medication. The largest group within this sample that were prescribed psychoactive drugs were in receipt of anti-depressants (19%), whilst hypnotic/sedatives were prescribed to 18%, opiates to 9%, and methadone to 4% of cases.

Nearly two-thirds (63%) of cases in 2008 died of accidental poisoning by narcotics & psychodysleptics, whilst only 2.2% died of accidental poisoning by alcohol. Four-fifths (79%) died accidentally, 10% by suicide, and in 11% the intention was underdetermined. Fourteen cases suffered a traumatic death, such as hanging, drowning, or road traffic accident (see Oyefeso et al, 2006).

Figure 9: Number of np-SAD cases involving alcohol and drugs, by age-group, 2008



Drug mortality amongst young people

The UK Drug Strategy (Home Office 2008) defines 'young people' as being aged 16-24 years old. This short section looks at drug-related deaths amongst this age-group. On average, between 1999 and 2008, this age-group accounted for 7.3% of all deaths notified to Programme that meet the np-SAD case criteria. This proportion increased from 1.5% in 1999 to 13.4% in 2007, but fell to 9.1% in 2008. There were a total of 114 relevant cases in 2008.

Four-fifths (79%) of those dying were male, just over half (54%) were unemployed or in full-time education. The young people had various living arrangements: two-thirds (63%) were resident with other people (principally their parents or other family members), whilst 6% had no fixed abode.

Where known, 66% had a history of drug abuse or dependence, including 'recreational' use. Twelve of the 135 who died in 2008 were known to inject. Only 24% were in receipt of prescribed medication; this was mainly anti-depressants, hypnotics/sedatives, anti-psychotics, and methadone.

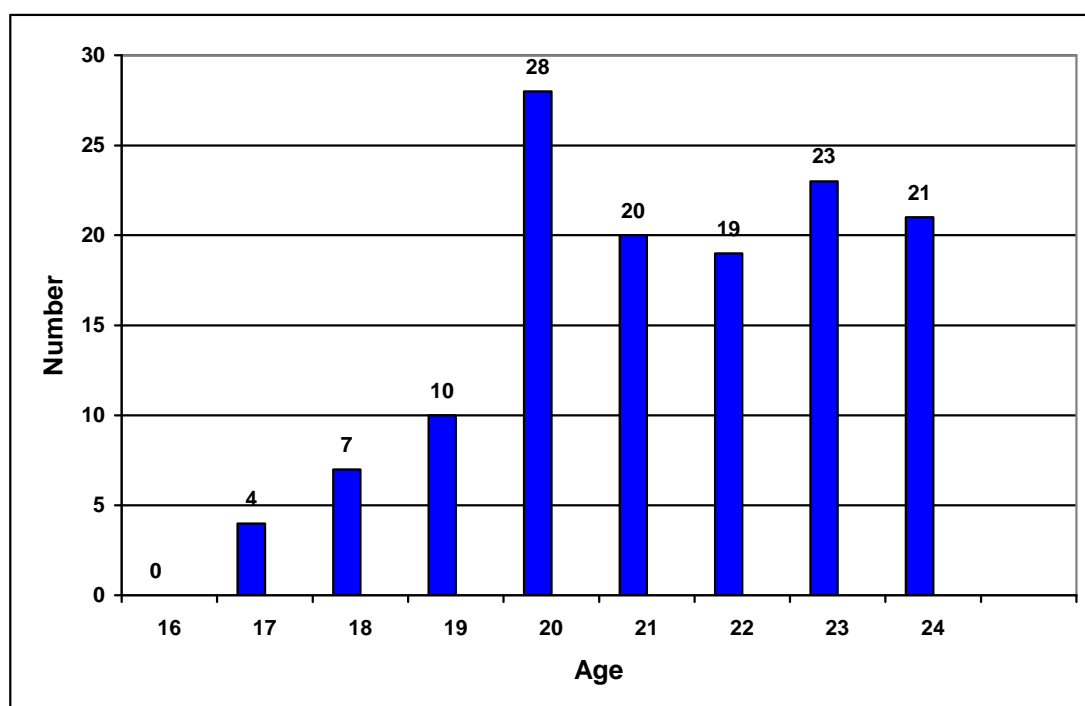
Twenty-eight of the young people who died were aged 20, accounting for the greatest proportion of deaths in the 16-24 age-group. The age distribution of drug-related deaths amongst young people is much higher for those in their twenties than those who were teenagers (Figure 10).

The principal drugs implicated in death were heroin/morphine (38%), alcohol-in-combination (32%), and methadone (27%). Stimulants also accounted for a large proportion of cases: cocaine (16%), ecstasy-type drugs (8%), and amphetamine (7%).

Four-fifths (82%) of deaths were accidental, 8% intentional, and in 10% of cases the intention was undetermined.

The place of death for this young population included a variety of locations, but the majority (46%) occurred at home, with a further 16% at someone else's home, 25% in hospital, and 6% on a street or road.

Figure 10: Number of drug-related deaths amongst young people by single year of age, 2008



Drug mortality amongst older drug users

In recent years, more attention has started to be given to the mortality of older drug users. This is due, in large part, to the fact that the drug addicts of the 1970s and 1980s are now middle-aged or approaching retirement age. As part of the natural ageing process they become more susceptible to a wider range of factors that can affect their survival, especially biological ones. Older drug users are defined here as those aged 50 years or more at the time of death and with a known history of drug abuse or dependence. However, they need not have been known to treatment services.

The literature suggests that many individuals dependent on drugs are surviving longer than did their predecessors in the 1960s, 1970s, and 1980s, often because of healthier lifestyles, opioid maintenance treatment, and anti-retroviral treatment following the HIV/AIDS epidemic of the mid-1980s (Ghodse et al, 1998; Muga et al, 2007). This better survival rate is reflected in the fact that the proportion of cases notified to the np-SAD over the past decade accounted for by this age-group rose from less than 0.1% in 1999 to 4.2%. The median age at death of those with a history of drug abuse was 29.7 years in 1999; by 2008 this had risen to 36.4 years.

The demographic profile of this sample (n = 63) is broadly in line with all cases notified to the Programme. More than half (57%) were unemployed, compared with 25% employed,

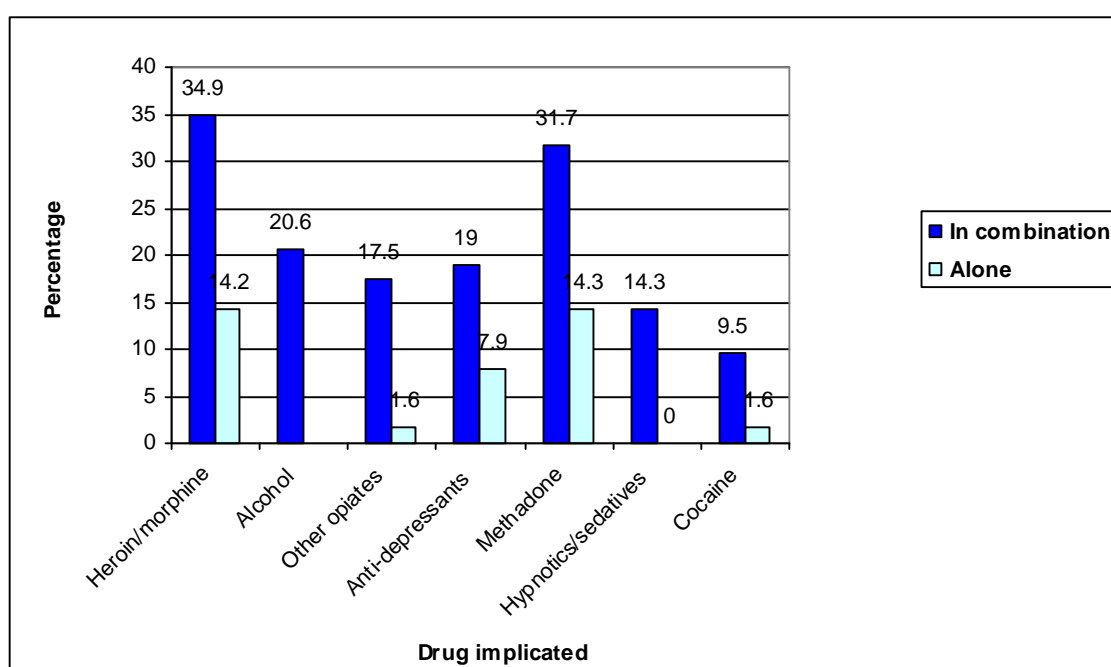
and 10% retired. Half (52%) lived by themselves whilst only 35% lived with others. Males accounted for 70% of deaths. The number of deaths declined as ages rose; the oldest individuals were 74 years of age. Three-quarters of cases died in defined residential premises and 16% in hospital.

Anti-depressants were the most commonly prescribed drugs (37%), followed by other opiates/ opioid analgesics (27%), hypnotics/ sedatives (27%) and methadone (24%).

Both heroin/morphine (14%) and methadone (14%) were the largest drug categories to be solely implicated (Figure 11). Anti-depressants accounted for 8% of drugs implicated on their own. Overall, heroin/morphine (35%) and methadone (32%) accounted for most of the death. There were also important contributions made by other opiates/opioid analgesics, anti-depressants, hypnotics/ sedatives, cocaine and alcohol-in-combination.

Two-thirds (65%) died from accidental poisoning; mainly opiates, anti-depressants and hypnotics/sedatives. Suicides accounted for 14% of cases, chiefly intentional overdoses involving anti-depressants and/or hypnotics/sedatives or hanging. A further 11% were poisonings of undetermined intent.

Figure 11: Principal substances implicated in deaths of older drug users, 2008



New substances emerging

As part of its surveillance function, in recent years, the np-SAD Annual Report has reported on new substances which are appearing on the drug scene and which have either been noted in post mortem toxicological reports and/or implicated in deaths reported to the Programme. In the main, new substances appear first in the toxicological reports and then sometime later in the cause of death. In many instances these substances are only identified because they are specifically screened for as the result of police intelligence, witness statements, and forensic evidence found at the scene – such as paraphernalia or containers. However, increasingly more substances are detected through more extensive and sensitive screening techniques, as explained by Simon Elliott in the opening section of last year's Annual Report. Alerts from forensic toxicology laboratories, law enforcement agencies and reliable 'user' reports, as well as monitoring of websites, assist in suggesting what substances might be becoming available in the drug market-place. Below we briefly examine some of the substances over which law enforcement agencies, health professionals, and policy-makers have expressed concern. See the Emerging Issues section below for further information regarding possible new drugs that might need monitoring.

Methylamphetamine

This substance, commonly known as 'ice', was first recorded in post mortem toxicology reports submitted in respect of deaths in 2005 (two cases). To date, the Programme is aware of six cases in each of the years 2006 to 2008 where methylamphetamine was recorded in

the toxicology report, and where it was not a metabolite of MDMA or amphetamine. np-SAD is aware of 7 cases where this substance was implicated in death: one in 2006 and three in both 2007 and 2008.

Piperazines

These substances are still licit drugs in the UK. However, the Home Office has recently undertaken a public consultation on how these drugs and gammabutyrolactone (GBL) and 1,4-Butanediol (1,4-BD) should be brought under domestic control in line with an EU directive in April 2008. Twenty-five deaths in which post mortem toxicological analysis identified piperazines (principally benzylpiperazine or BZP) as being present have so far been notified to the Programme: 3 in 2006, 9 in 2007 and 13 in 2008. They have been implicated in 16 of these deaths, usually in combination with stimulants and alcohol.

GBL and 1,4-BD

Following gammahydroxybutyrate (GHB) becoming a Controlled Drug in July 2003, many consumers of this substance have sought licit alternatives, the principal one being GBL. Once consumed, however, this substance and 1,4-BD are metabolised into GHB so it is difficult to identify what the original substance ingested was, unless there are witness statements or containers available for forensic analysis. The Programme is aware of seven cases in the last 5 years where the death may be attributable to GBL, three in 2007 and one each in 2004-6 and 2008.

V Profile of cases in England meeting criteria for monitoring the Government's drug strategy, 2008

Introduction

This section considers cases meeting the definition used to monitor the Government's drug strategy. Whilst the official target is being measured by reference to figures compiled by

the Office for National Statistics (ONS), information generated by cases notified by coroners to the np-SAD can complement their data.

Definition of cases

The definition of a drug-related death adopted for the Government's drug strategy is somewhat narrower than that for an np-SAD case (see Appendix 2 for details). It is possible to derive information on this narrower basis by operationalising the np-SAD case definition using the method described below. The np-SAD approach is to exclude two specific categories from its case definition; those remaining are regarded as meeting the criteria for the Government's definition. The two categories excluded from the np-SAD cases are; (a) deaths of non-drug abusers where no Controlled Drugs were found at post mortem or where a specific compound analgesics was found at post mortem; and (b) deaths of drug abusers where no Controlled Drugs were

found at post mortem or where a specific compound analgesics was found at post mortem and the mechanism of death was hanging, drowning, accident, etc.

For the purposes of this section, the np-SAD has closely followed the same approach as the Office for National Statistics and the General Register Office for Scotland in respect of the compound analgesics not treated as Controlled Drugs, the exception being that of codeine. This cannot be excluded from our consideration because it is a by-product of the degeneration of heroin in the body and thus may represent the consumption of heroin rather than codeine. This will not have affected many cases.

Profile of cases

The following analysis looks at deaths occurring in England during 2008 which meet the above selection criteria. Approximately 77% (1,055/1,377) of all cases reported to the Programme by HM coroners in England met these criteria. Demographic details and a summary of principal drugs implicated in death are presented below.

1. Demography

The majority of cases were male (77%). The median age at death was 38 years (semi-inter quartile range = 6.7), with three-quarters (76%) being under the age of 45 years. Where ethnicity was known, the vast majority (94.5%) were White. Where addict status was known, the majority (76%) had a history of drug-dependence or abuse. Just over half (53%) of cases were unemployed and 45% of cases were living alone or of no fixed abode at the time of their death (Table 10).

2. Location of death

The majority of cases (72%) died at a defined residential address (e.g. the deceased's home address or other private residential address), one-fifth (19%) died in hospital and the remainder (9%) died elsewhere (e.g. in a public place).

3. Substances implicated in death

Psychoactive substances were implicated in 1,045/1,055 deaths (99%). The principal substances implicated in drug-related deaths were: heroin/morphine (55%) and alcohol in combination with other drugs (32%). Other classes of drugs making a sizeable contribution (in excess of 10%) to deaths were: other opiates/opioid analgesics; methadone; hypnotics/ sedatives; cocaine; and anti-depressants. Heroin/morphine as the sole implicated drug accounted for 20% of deaths. The breakdown of psychoactive substances implicated in death is presented in Table 11.

Table 10: Demographic characteristics of cases reported to np-SAD meeting the criteria for monitoring the Government's drug strategy, England, 2008

Variable	Category	Number (%)
Total		1,055 (100.0)
Gender	Male	812 (77.0)
	Female	243 (23.0)
Employment status	Unemployed	556 (52.7)
	Employed	276 (26.2)
	Childcare/house person	16 (1.5)
	Student	19 (1.8)
	Retired/sickness/invalidity	101 (9.8)
	Other	10 (0.9)
	Not known	77 (7.3)
Living arrangements	Alone	402 (38.1)
	With others	471 (44.6)
	No fixed abode	78 (7.4)
	Other	53 (5.0)
	Not known	51 (4.8)

Table 11: Psychoactive substances implicated in deaths reported to np-SAD meeting the criteria for monitoring the Government's drug strategy, England, 2008

Drug category	Number of cases where no other substance was implicated	Number of cases where drug was implicated
	No. (%)	No. (%)
Total of cases with psychoactive drug implicated	1,045 (100.0)	1,045 (100.0)
Alcohol-in-combination ⁽¹⁾	-	337 (32.2)
Amphetamines	12 (1.1)	50 (4.8)
Anti-depressants	14 (1.3)	130 (12.4)
Anti-epileptics	1 (0.1)	14 (1.3)
Anti-psychotics	3 (0.3)	32 (3.1)
Cannabis	1 (0.1)	17 (1.6)
Cocaine	41 (3.9)	164 (15.7)
Ecstasy-type drugs	10 (1.0)	28 (2.7)
GHB	2 (0.2)	12 (1.1)
Heroin/morphine	206 (19.7)	572 (54.7)
Hypnotic/sedatives	6 (0.6)	182 (17.4)
Methadone	74 (7.1)	245 (23.4)
Other opiates/opioid analgesics	41 (3.9)	202 (19.3)

(1) Alcohol on its own does not meet the criteria for an np-SAD case.

4. Age and drug implicated in death

In cases aged 15-44 years, heroin/morphine (59.6%) was the most frequently mentioned drug contributing to fatality. In those aged 45

years and over, other opiates/opiate analgesics (39.0%) followed closely by heroin/morphine (38.6%) were the most frequently mentioned as being implicated (Table.12).

Table 12: Age and drug implicated in deaths reported to np-SAD meeting the criteria for monitoring the Government's drug strategy, England, 2008

Age-group (years)	Number (%) where drug was implicated	Drug category (alone or in combination) most frequently implicated in each age group
All ages	1,045 (100.0)	Heroin/morphine (54.2%)
14 & under	1 (0.1)	Heroin/morphine and alcohol (one case)
15–24	101 (9.7)	Heroin/morphine (46.5%)
25–34	305 (29.2)	Heroin/morphine (67.2%)
35–44	397 (38.0)	Heroin/morphine (56.7%)
45–54	135 (12.9)	Heroin/morphine (47.4%)
55–64	64 (6.1)	Other opiates/opioid analgesics (51.6%)
65 & over	42 (4.0)	Other opiates/opioid analgesics (52.4%)

5. Underlying cause(s) of death

The proportions of ICD-10 categories of underlying cause of death were as follows:

- Accidental poisoning (X40-X47): 76.4%
- Intentional self-poisoning (X60-X67): 9.3%
- Poisonings of undetermined intent (Y10-Y14): 10.8%
- Other (e.g. natural causes, drowning, hanging, unascertained): 3.5%

6. Manner of death

The manner of death in these cases was considered to be as follows:

- Natural: 1.0%
- Accidental: 77.9%
- Suicidal: 9.5%
- Homicidal: 0.0%
- Undetermined: 11.5%
- Unclassified/not specified: 0.1%

VI Trends in deaths in England, 1999-2008

Introduction

This section examines deaths that occurred in England between 1999 and 2008, have been reported to the np-SAD, and where those cases meet the definition used to monitor progress against the Government's drug strategy (see Appendix 2). The analysis is based on a 'panel' approach, that is, only areas which reported in every single year of the ten-year period were examined. This

method enhances the statistical robustness of the findings and the conclusions that can be derived from them. This selection taken from 68 coronial areas represents about 83% of all cases meeting this case definition in England during the study period. In all, a total of 10,567 cases meet the criteria for inclusion in the sample analysed here.

Demographics

Summary information for some of the key demographics is given in Table 13 for the period as a whole. The information has not been broken down by year since there was very little variation either across the decade or in terms of changes from year-to-year. Previous annual reports from the Programme have noted the consistency in many of these

attributes over time in respect of those meeting the np-SAD case criteria, especially in terms of the proportion of ethnic groups represented, those aged less than 45 years, those who were male, living arrangements, employment status, place of death, and manner of death. These general patterns appear to hold also for the cases examined below.

Table 13: Demographic characteristics of cases reported to np-SAD meeting the criteria for monitoring the Government's drug strategy, panel of coroners' areas in England, 1999-2008

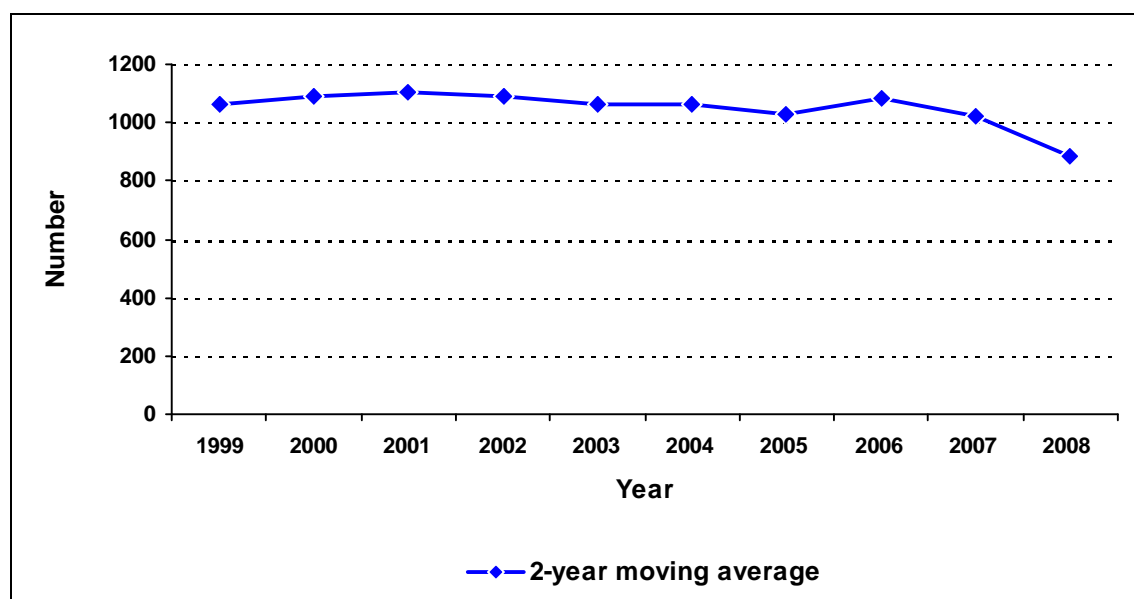
Variable	Category	Number (%)
Total		10,567 (100.0)
Gender	Male	8,239 (78.0)
	Female	2,328 (22.0)
Employment status	Unemployed	5,840 (55.3)
	Employed	2,912 (27.6)
	Childcare/house person	154 (1.5)
	Student	193 (1.8)
	Retired/sickness/invalidity	875 (8.3)
	Other	10 (0.9)
	Not known	77 (7.3)
Living arrangements	Alone	4,079 (38.6)
	With others	4,543 (43.0)
	No fixed abode	652 (6.2)
	Other	605 (5.7)
	Not known	680 (6.5)
History of drug use	History	7,627 (72.2)
	No history	1,909 (18.1)
	Not known	1,031 (9.7)
Place of death	Defined residential address	6,990 (66.1)
	Hospital	2,636 (25.0)
	Other locations	890 (8.4)
	Not specified	51 (0.5)

The proportion (78%) of cases that were males was slightly higher than the overall population of cases reported to the Programme. Where ethnicity was known, the overwhelmingly majority was White (95.6%), followed by Black 1.8%, Chinese and Other 1.6%, and Asian 1.0%; this profile is very similar to that in all drug-related deaths. Whilst 43% lived with others (chiefly immediate family or other relatives), 39% lived alone. A slightly higher proportion (6.2%) was of no fixed abode than found in the general population of cases notified to the np-SAD. More than half (55%) of the cases were unemployed and a further 8% were on benefits of some kind. In common with the profile of the general population of cases notified, two-thirds (66%) died at a defined residential address, and a quarter (25%) in hospital. Where known, the vast majority (80.0%) of cases had a known previous history of drug abuse or addiction; again, this is higher than for cases more

generally. This is to be expected since the criteria used for the Drug Strategy identify those who have abused drugs, had a dependence on them, or where poisoning was the cause of death and where a Controlled Drug was found in the post mortem toxicological examination.

Figure 12 shows the trend (using a 2-year moving average) in the number of deaths meeting the criteria for the Drug Strategy definition that occurred in a panel of English coronial areas from 1999 to 2008. The number of deaths remained fairly stable throughout most of this period, although there appears to be a decline in the last few years. However, this fall may not be as pronounced as the graph indicates as more inquests relating to deaths in 2008 are completed and notified to the Programme. Upward revisions to figures for the most recent year reported on should be expected.

Figure 12: Trend in number of deaths meeting the Drug Strategy criteria, selected panel of coronial areas in England, 1999-2008



The number of cases broken down by gender is presented in Figure 13. There has been some fluctuations in the male:female ratio over the decade, but no discernible overall trend. Overall, there were ten deaths of individuals aged less than 15 years, fairly evenly distributed across the period. The number of deaths amongst those aged 15 to 24 years varied over time (Figure 14). An increasing proportion of deaths were accounted for by

those in the 25-44 age-group. In the oldest age-group (65 years and over) there was a decrease in the number of deaths, particularly in the more recent years. The median age at death increased from 32.0 to 37.8 years between 1999 and 2008. Where known, those with the proportion of cases with a known history of drug abuse or dependence fell from 85 to 80% over the decade, although there were year-to-year variations.

Figure 13: Trend in number of deaths meeting the Drug Strategy criteria, selected panel of coronial areas in England, by gender, 1999-2008

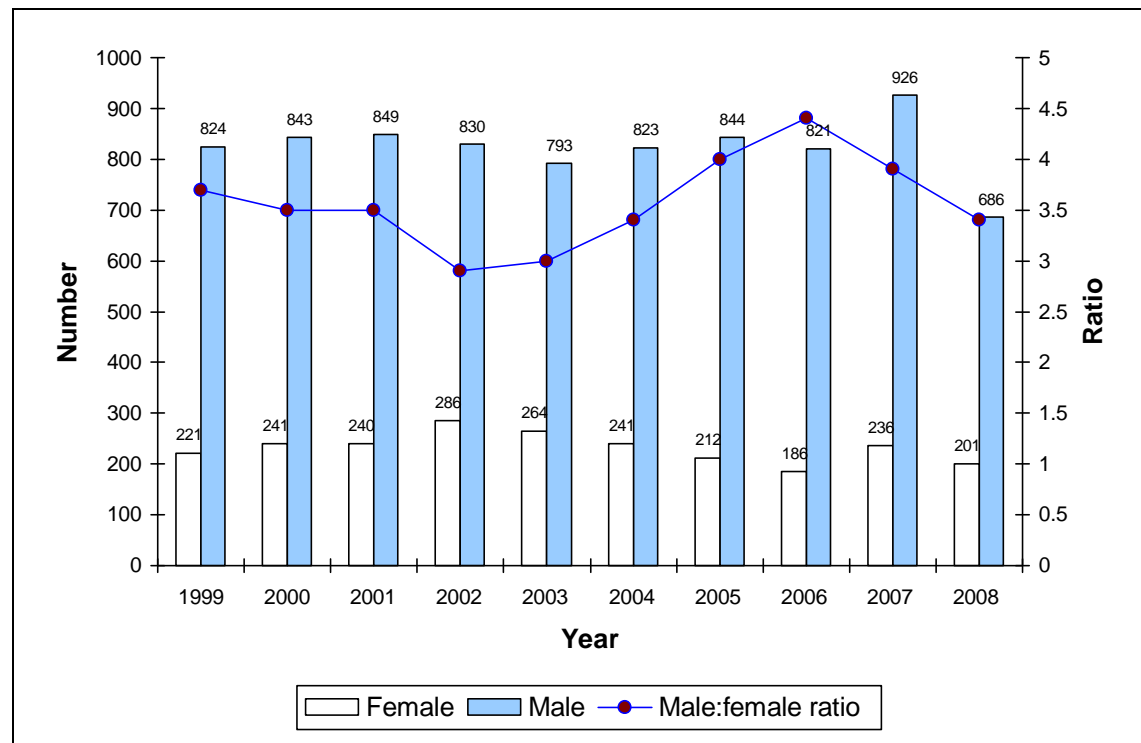
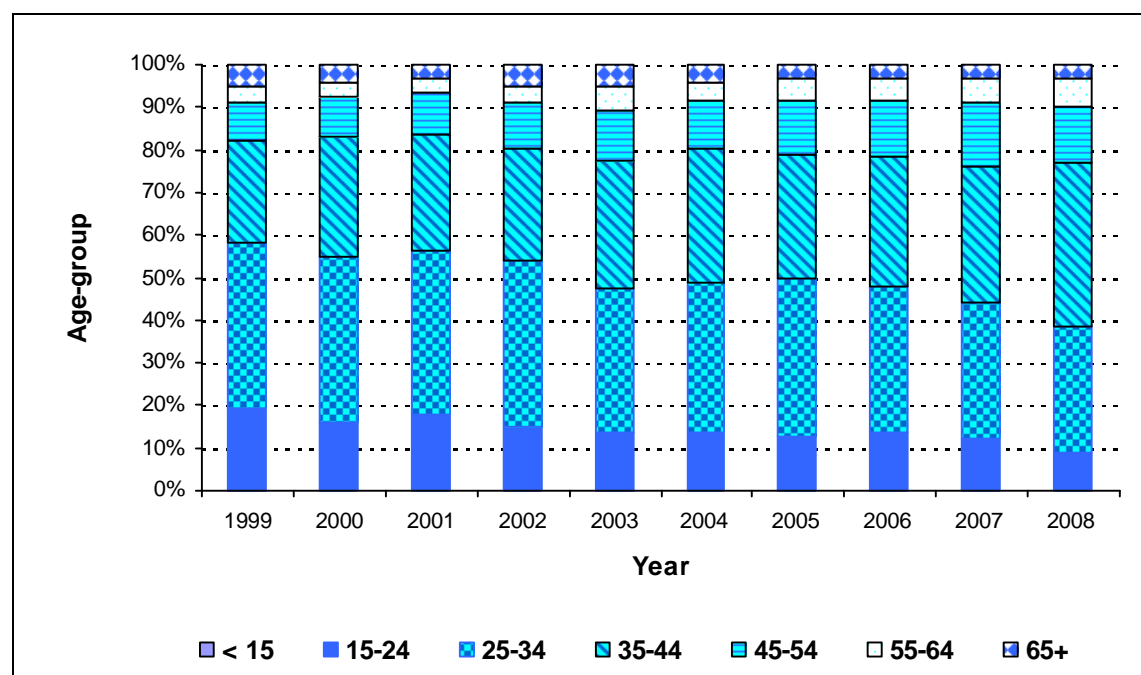


Figure 14: Trend in proportion accounted for by age-group of deaths meeting the Drug Strategy criteria, selected panel of coronial areas in England, 1999-2008

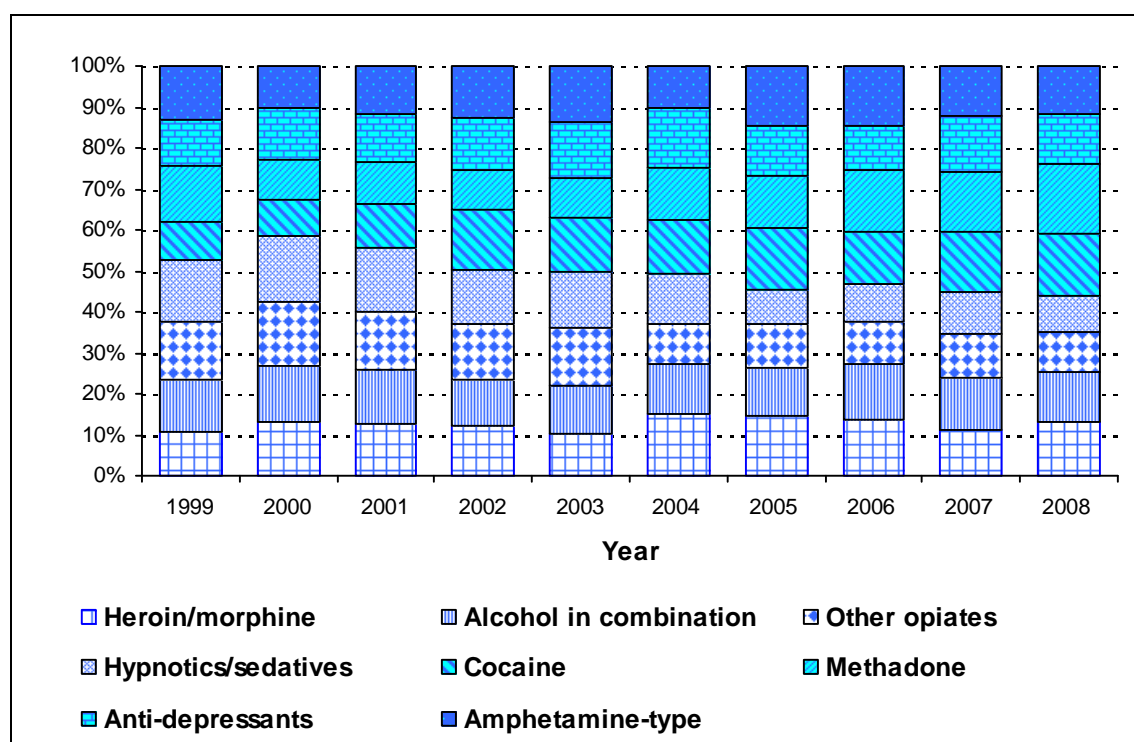


Substances implicated in death

Figure 15 shows the substances commonly implicated, whether alone or in combination, in death. Heroin/morphine accounted for the largest proportion (55%), followed by alcohol-in-combination 36%, and other opiates/opioid analgesics. The other most frequently implicated drugs were: hypnotics/sedatives

(25%), methadone (18%), cocaine (15%), and amphetamine-type substances (amphetamine, MDMA, etc: 8%). These proportions did not change dramatically over time, although there appears to have been an overall decline in the contribution made by hypnotics/sedatives.

Figure 15: Trend in substances implicated in deaths meeting the Drug Strategy criteria, selected panel of coronial areas in England, 1999-2008



Conclusions

The majority of deaths in this panel sample were male, echoing UK, European and international trends. The increase in the median age observed here is in line with findings from Western Europe. This shift probably reflects an ageing-cohort of healthier drug addicts. The fall in the proportion of

cases with a known history of drug abuse or dependence may be due to wider use of recreational drugs in combination and with alcohol. Overall, the socio-economic demographics of this population have remained fairly stable and largely mirror those of the wider population of drug-related cases.

VII Emerging issues

Introduction

This new section has been included in the Annual Report to provide up-to-date information on emerging trends and issues to those who investigate drug-related deaths (DRDs) and those who are trying to prevent such fatalities. A briefing on DRDs was issued in May 2009 to coroners and their staff, as well as to the Department of Health and the devolved administrations providing an update on trends emerging from np-SAD notifications and issues arising from the information submitted and identified from other reliable sources. This document forms part of the early warning and alerting functions of the Programme.

Purpose of report

The aim of this brief section is to alert readers to possible developments that could arise in their area. It summarises relevant alerts that

have been identified over the twelve-month period since the last annual report, whether emerging from the data submitted to np-SAD and/or from other agencies. The material considered for inclusion not only relates to actual fatalities but also other incidents that may have resulted in drug-related deaths i.e. 'near-misses'.

Sources

The main trends and issues highlighted here emerge from the submitted forms, communications from coroners, and other relevant sources (such as enquiries from Drug and Alcohol Action Teams – DAATs - and Primary Care Trusts - PCTs). This section also draws on other sources such as those described in the review of the literature, and intelligence from forensic toxicological agencies.

Issues emerging from np-SAD cases

Some of these issues have already been mentioned in the description of np-SAD cases reported for 2008 deaths, and indeed featured in last year's report. However, it is timely to include them here because of their growing presence on the drug scene.

Piperazines

Piperazines sold as so-called "legal highs" have emerged both in toxicological reports and cause(s) of death. The number of mentions in toxicological reports increased three-fold between 2006 and 2008. These substances, chiefly BZP (Benzylpiperazine) but also TFMPP-3 (3-Trifluoromethylphenylpiperazine monohydrochloride) have been implicated in 64% of the deaths notified to the Programme.

Methylamphetamine

This is being increasingly reported in both post mortem toxicology reports and recorded in the cause of death, typically with other stimulants. However, numbers remain small. This substance still needs to be monitored.

GBL and 1,4-BD

The Programme is aware of seven cases in the last 5 years where the death may be attributable to GBL. However, there does not appear to be an increase in these small numbers as a result of GHB having been made a Class C drug. The situation will continue to be monitored, especially to determine what effect, if any, control of GBL and 1,4-BD under domestic law makes on the number where GHB is found in post mortem toxicology samples or is implicated in death.

DNP

The slimming aid DNP (2,4-Dinitrophenol) has caused at least one fatality in 2008, that of a 46 male who died from multiple organ failure caused by dinitrophenol intoxication. Paracetamol and low levels of dihydrocodeine were also present at post-mortem. An open verdict was returned.

Illicit drug alerts

A number of themes emerge from inquiries from PCTs, DAATs and coroners, authoritative research or sources, as well as “alerts” that have been brought to our attention since the last Annual Report. If these ‘reports’ result in actual fatalities, it would be expected that these deaths would be notified to the np-SAD about six months later, on average, i.e. at the conclusion of the relevant inquests. However, those investigating suspected drug-related deaths need to be forewarned; it is therefore essential that any “alerts” are based on sound and reliable reports from credible sources.

During 2008 the np-SAD received several requests for information on alleged increases in heroin-related fatalities in south-east and north-east England; these followed media and use reports of contaminated heroin, e.g. one from West Sussex in October 2008. So far, based on information currently in the np-SAD database, these concerns are yet to be verified. However, it is worth noting that in its annual UK Threat Assessment, the Serious and Organised Crime Agency (SOCA) issued a warning about the increasing supply and availability of very pure white heroin (hydrochloride), which can easily be confused with cocaine (SOCA, 2009).

Substantiated and authoritative reports, confirmed by laboratory investigations, of heroin contaminated with anaerobic bacteria leading to wound botulism were issued by the Health Protection Agency and other relevant bodies as follows: Dublin, 30 November 2008; Oxfordshire and Berkshire, 21-27 October 2008; Cambridgeshire, 5 March 2009; London, East of England, and South East England, March 2009. This geographical spread is similar to that experienced in 2000 when tens of addicts died across the British Isles from what was believed by intelligence sources to be from a single source. In the present situation, both *Clostridium novyi* and *Clostridium botulinum* have been identified as the infectious agents causing wound botulism amongst injecting heroin users, leading to systemic failure and even death (one was reported from Dublin in late 2008 and one in Berkshire in early February 2009).

Benzodiazepines have featured in two alerts. “Thai blue” or “Bluey”, an imported 10mg form of diazepam, was reported as being available on the black market in South Tyneside in late October 2008. In Wiltshire in November 2008 there were media reports of alprazolam (a

benzodiazepine) being mistaken for heroin. Similar warnings were issued by the DAATs in Brighton & Hove, Camden and Reading in April 2009.

In February 2009, a reputable forensic toxicology laboratory reported the seizure by police in Oxfordshire of ecstasy tablets containing unusually high levels of MDMA. Consuming such tablets unknowingly puts users at even greater risk of dying than usual.

During the course of this year, the Forensic Science Service has been receiving increasingly more samples for analysis containing 4-fluoroamphetamine. About one-fifth of these samples from police seizures also contained amphetamine. This substance is structurally related to phenethylamines and comes under the same generic definition of ecstasy-type drugs, and is thus a Class A drug.

In April 2009, warnings about a substance circulating in Preston that was being sold as cocaine and “MDNA” (sic) were issued by the local DAAT and police. The drug was reported to cause bouts of unconsciousness and a loss of feeling down the left side of the body.

During the second quarter of 2009 the Forensic Science Service received submissions of three times as many samples of mephedrone for analysis than it had in the previous 12-month period. Mephedrone (methylethcathinone) is not a controlled substance, is available for purchase on-line, and is being marketed by some stores as “legal cocaine”.

There have been calls from both national and European agencies to remain vigilant for the emergence of other synthesized “legal highs” such as “spice” (or more formally the synthetic cannabinoids “JWH-018”, “CP47,497” and “HU-210”) or herbal substances such as *Salvia Divinorum* and *kratom*. The Forensic Science Service reported at the end of July 2009 that seizures containing JWH-018 and JWH-073 had been submitted by police in Essex and Hertfordshire. A report recently published by the Advisory Council on the Misuse of Drugs highlights the dangers of synthetic cannabinoids recommending their control under the Misuse of Drugs Act 1971 (ACMD, 2009).

In July 2008 the National Patient Safety Agency issued a Rapid Response Report on "Reducing dosing errors with opioid medicines". An inquest held in Portsmouth in April 2009 into 10 deaths in a single hospital concluded that in three cases the patients had died of lethal morphine overdoses while morphine administration had contributed to the death of two others. Such cases have also been identified in other areas during the present research study into case identification and notification being undertaken by the Programme (see next Commentary for further details).

There has been much media speculation recently about the possible role the general anaesthetic propofol may have had in the death of the popular entertainer Michael Jackson. This drug appears to have an abuse potential; this has resulted in calls to tighten up on implementing correct safe storage of this Prescription Only Medication. Propofol has been implicated in nine deaths between 2000 and 2006 notified to the Programme; three of these cases were suicides.

VIII Commentary

General patterns

This is the tenth annual report produced by the *national programme* on Substance Abuse Deaths. The report provides useful information that continues to assist policy makers, such as the Department of Health and the Devolved Administrations, to assess the impact of service provision and other interventions.

The demographic profile of np-SAD cases remains consistent with previous annual reports. The majority of cases were males (74%), under the age of 45 years (71%), and White (95%). Where the information was available, at least 68% of the sample was drug abuser/ dependent, as defined by the Programme.

As indicated earlier, information on individual cases in Northern Ireland is more comprehensive. This year, as in 2006 and 2007, in addition to the information on deaths from the Coroners Service for Northern Ireland, the Northern Ireland Statistics and Research Agency provided data on drug-related poisoning deaths registered by the General Register Office for Northern Ireland up to the end of 2008.

Annex AR4 provides information on the rates per 100,000 population (aged 16 and over) for np-SAD cases in 2008 broken down by Drug and Alcohol Action Team area of usual residence and by place of death. This report also contains two further annexes: (AR5) a breakdown by DAAT on gender, age-group, ethnicity, and main Drug Strategy drugs implicated; (AR6) a breakdown by Primary

Care Trust in England, Strategic Health Authority (SHA) area for England, by Substance Misuse Advisory Regional Team (SMART) area for Wales, and by Health Board in Northern Ireland.

Brighton & Hove recorded the highest annual death rate (20.7/100,000 population) in 2008. Dumbarton (15.4) and Blackpool & the Fylde (11.0) recorded the second and third highest annual death rates in 2008, respectively.

The following areas reported that there had been no relevant cases in 2008: Ceredigion; City of London; Guernsey; Great Yarmouth; Isles of Scilly; Stamford; and South Shropshire.

On the whole, the present annual report has seen a 3.2% decrease in the number of DRDs reported to the np-SAD compared to the number reported in last year's report. There were 1,055 deaths that occurred in England in 2007 that were reported to the Programme which meet the criteria used for monitoring the Government's drug strategy. This is about 13% lower than the corresponding number for 2007 (1,206).

Although the compliance rate (95%) of coroners is higher than last year and the number of cases reported from the same coroners' areas during the identical periods in 2007 and 2008 increased, the observed decline in the number of deaths is likely to be real rather than a reflection of improved reporting rates by some coroners.

Cause of death

Most deaths (64%) in 2008 were due to accidental poisoning, 13% were intentional self-poisoning, and 12% from poisonings of undetermined intent. These proportions are almost identical to those for deaths in 2007.

Over recent years there has been a trend towards more substances, including alcohol, being implicated in deaths. In the previous report we noted a major shift in this direction - with a corresponding decline in mono-valent deaths. However, 2008 has seen an increase in the proportion of mono-valent deaths.

Whereas in 2007 the proportion of deaths accounted for by one substance was 33% in 2008 this had risen to 42%. The proportion of fatalities related to alcohol-in-combination increased fell from 36% to 32% over this period.

Fatalities related to the consumption of most illicit drugs and prescribed medications appear to have shown decreases. However, there was an increase in the proportion of deaths involving methadone and anti-psychotics in 2008.

Substances implicated in death

Opiates and opioid analgesics still remain the principal class of drugs implicated in drug-related deaths. The proportion for which they account has remained consistent over time at around 70%. Heroin/morphine on its own or in combination with other substances (including alcohol) typically accounts for about 45% of all cases notified to the Programme.

There were no really significant shifts in the proportions of deaths with which specific drugs were associated. Polysubstance abuse, including the consumption of alcohol, remains a key issue in the UK. The drug profile has remained fairly stable over the last decade (see the section on trends above).

What is noticeable, however, is the gradual emergence of new, uncontrolled, substances on the recreational drug scene. For example, we have noted the increasing presence of methylamphetamine, and, more particularly,

piperazines (chiefly BZP) in the post mortem toxicology results submitted to the Programme. This suggests that consumers are seeking licit substances when other stimulants become controlled. It is possible that such substitution may occur when piperazines and GBL/1,4-BD eventually fall within the compass of the Misuse of Drugs Act 1971.

The last few annual reports have reported on the effects of the phased withdrawal of co-proxamol over the three-year period January 2005 to December 2007. Amongst the cases reported to np-SAD, the proportion of cases involving co-proxamol or dextropropoxyphene fell from 7.7% in 2004 to 1.1% in 2008. The proportion accounted for by tramadol rose from 2.2% in 2004 to 3.6% in 2006 and has since remained stable. These findings are line with those detailed in the literature review above reported by Hawton et al (2009).

Conclusions

The format of this report has changed somewhat in comparison with previous years. More information has been presented on long term trends to provide more context for the findings concerning drug-related deaths in 2008. The identification of emerging trends and possible new developments, from both np-SAD data and other sources, has allowed the Programme to flag-up potential issues that need monitoring.

The Programme has initiated a research project to ascertain the quality of the information received from coroners, as well as the extent to which all relevant cases are being identified and submitted. This will assist in further improving the quality of the various outputs that the Programme seeks to provide.

The surveillance role of the Programme in identifying new problems can be illustrated by reference to the fact that the role of GHB/GBL, and piperazines in death was reported in this report. The emergence of toxicological reports mentioning methylamphetamine and piperazines have also been discussed in this year's report. The possible substitutions of illegal substances with "legal highs" and of tramadol with co-proxamol have also been examined. By identifying changes in drug use and associated mortality elsewhere, the

Programme is able to look out for and monitor developments in the UK.

As part of the early-warning function, the Programme has summarised emerging trends and identified potential issues for the future that need monitoring. These have been issued as a briefing earlier in the year, and now as an integral part of the annual report.

The Programme regularly updates information on substances such as "legal highs" and other substances of concern to the UK Early Warning System, which in turns cascades this information to the European Early Warning System maintained by the European Monitoring Centre on Drugs and Drug Addiction (EMCDDA) and other EU agencies.

Information has been provided by the np-SAD to a number of public consultations since the publication of the last report. These consultations include those conducted by the Advisory Council on the Misuse of Drugs regarding the classification of MDMA, and the domestic control of piperazines and GBL and 1,4-BD; and the Department of Transport's consultation on road safety compliance in respect of alcohol and drug driving. In addition, the Programme has continued to contribute

information to Parliamentary Questions and Ministerial briefings.

Findings from the Programme's annual report and research articles published in peer-reviewed journals articles also feed into both

the national and international research base. For example, the key findings from the np-SAD are included in the annual report from the UK Focal Point to the EMCDDA, as well as to various annual United Nations publications.

Annexes

Annex AR1: np-SAD drug-related deaths by underlying cause(s) of death, 2008

ICD-10	No. of cases (n = 1,490)	%	Description
X40	10	0.7	<i>Accidental poisoning</i> Non-opioid analgesics, antipyretics and anti-rheumatics
X41	117	7.9	Anti-epileptic, sedative-hypnotic, Anti-parkinsonism and psychotropic drugs, not elsewhere classified
X42	794	53.3	Narcotics and psychodysleptics (hallucinogens), not elsewhere classified
X43	1	0.1	Other drugs acting on the autonomic nervous system
X44	11	0.7	Other and unspecified drugs, medicaments and biological substances
X45	19	1.3	Alcohol
X60	17	1.1	<i>Intentional self-poisoning</i> Non-opioid analgesics, antipyretics and anti-rheumatics
X61	87	5.8	Anti-epileptic, sedative-hypnotic, Anti-parkinsonism and psychotropic drugs, not elsewhere classified
X62	81	5.4	Narcotics and psychodysleptics (hallucinogens), not elsewhere classified
X64	2	0.1	Other and unspecified drugs, medicaments and biological substances
X65	3	0.2	Alcohol
X69	2	0.1	Other & unspecified chemicals & noxious substances
Y10	4	0.3	<i>Poisoning of undetermined intent</i> Non-opioid analgesics
Y11	67	4.5	Anti-Parkinsonism drugs
Y12	103	6.9	Narcotics/psychodysleptics
Y14	4	0.3	Other/unspecified drugs
Y15	7	0.5	Alcohol
Y17	1	0.1	Other gases and vapours
F10.0	1	0.1	<i>Mental & behavioural disorders due to psychoactive substance use</i> Intoxication - alcohol
F10.2	1	0.1	Chronic alcoholism
F11.0	1	0.1	Intoxication - opiates
F11.1	6	0.4	Harmful use - opioids
F11.2	5	0.3	Dependence – opioids
F13.0	1	0.1	Intoxication – hypnotics/sedatives
F14.1	3	0.2	Harmful use – cocaine
F14.2	2	0.1	Dependence – cocaine
F15.0	4	0.3	Intoxication – stimulants
F15.1	2	0.1	Harmful use - stimulants
F19.1	1	0.1	Harmful use – multiple other
F19.2	2	0.1	Dependence – multiple/other
Z72.2	4	0.3	Drug abuse, personal history
I10	1	0.1	<i>Cardiovascular system – diseases, defects or conditions affecting</i> Essential (primary) hypertension
I11	1	0.1	Hypertensive heart disease
I20-I25	1	0.1	Ischaemic heart diseases
I25.1	1	0.1	Atherosclerotic heart disease
I33.0	1	0.1	Acute & subacute infective endocarditis
I42.6	1	0.1	Alcoholic cardiomyopathy
I49.9	1	0.1	Cardiac arrhythmia
I50.1	1	0.1	Left ventricular failure
I51.4	1	0.1	Myocarditis, unspecified
I51.5	1	0.1	Myocardial degeneration

ICD-10	No. of cases (n = 1,490)	%	Description
J18.0	1	0.1	<i>Diseases of the respiratory system</i>
J18.1	1	0.1	Bronchopneumonia
J44.9	1	0.1	Lobar pneumonia
J46	2	0.1	Chronic obstructive airways disease
J69.0	1	0.1	Status asthmaticus/acute severe asthma
			Aspiration pneumonia
K55	1	0.1	<i>Diseases of the liver</i>
K70	3	0.2	Vascular disorders of intestine
K70.3	1	0.1	Alcoholic liver disease
K72.0	1	0.1	Alcoholic cirrhosis of liver
K72.9	1	0.1	Hepatic failure
K76.0	2	0.1	Hepatic failure, unspecified
K85	1	0.1	Fatty (change of) liver, not elsewhere classified
			Acute pancreatitis
S06.9	1	0.1	<i>Injuries</i>
S09.9	2	0.1	Intracranial (brain) injury, unspecified
S17	2	0.1	Head injuries unspecified
S20-S29	2	0.1	Crushing injury of neck
			Injuries of the thorax
V04.1	1	0.1	<i>Road traffic incidents</i>
V19.4	2	0.1	Pedestrian injured in collision with heavy transport
			Driver injured in collision with other & unspecified motor vehicle in traffic accident
V23	1	0.1	Motorcycle rider injured in collision with car, etc
V43.5	3	0.2	Car driver injured in collision with car, etc
V44.5	1	0.1	Driver injured in collision with heavy transport work
V47.5	2	0.1	Driver injured in collision with fixed/stationary object
V48.5	2	0.1	Car driver injured in non-collision accident
V86.0	1	0.1	Driver of all-terrain .. injured in traffic accident
V89.2	1	0.2	Person injured in unspecified motor vehicle accident – traffic
W76	4	0.3	<i>Hanging</i>
X70	40	2.7	Other accidental hanging and strangulation
Y20	1	0.1	Intentional hanging
			Hanging, undetermined intent
T58	1	0.1	<i>Asphyxia</i>
T71	1	0.1	Asphyxiation from effects of carbon monoxide
			Asphyxiation
W66	1	0.1	<i>Drowning & submersion</i>
W69	1	0.1	Whilst in bath tub
W70	2	0.1	Whilst in natural water
W74	3	0.2	After fall into natural water
			Unspecified
A41.9	1	0.1	<i>Other</i>
E10	1	0.1	Septicaemia, unspecified
E14	1	0.1	Diabetic ketoacidosis
E87.2	1	0.1	Diabetes mellitus, unspecified
G40.9	2	0.1	Metabolic acidosis, exc. diabetic acidosis
M10	1	0.1	Epileptic seizures
T07	4	0.3	Gout
T40.1	2	0.1	Multiple injuries, unspecified
T40.5	1	0.1	Poisoning, heroin
T79.3	1	0.1	Poisoning, cocaine
			Post traumatic wound infection, not elsewhere classified
W17	1	0.1	Other fall from one level to another
W19	2	0.1	Unspecified fall
W26	1	0.1	Contact with knife, sword or dagger (stab wound)
R99	9	0.6	Unascertained

Where possible, causes of death have been grouped together in terms of the mechanisms of death. At present, although all causes of death on the death certificate (together with other information if available) are taken into consideration in classifying underlying cause of death, the principal cause of death is used here by np-SAD to allocate the ICD-10 code. In order to achieve a greater level of consistency, a hierarchical system was introduced for classifying the underlying cause of death using ICD-10 criteria for deaths involving multiple substances. Deaths that involve a combination of narcotics and other psychoactive drugs are coded as narcotic deaths. Where possible a code which specifies intentionality is used.

Annex AR2: np-SAD cases in 2008 by coroner's jurisdiction (16 years and over) and deaths in 2007 reported in 2008/9

Coroner's Jurisdiction & county district	np-SAD deaths Jan-Dec 2008	Annual death rate per 100,000 population ⁽¹⁾	np-SAD 2007 deaths reported in 2008/9 ⁽²⁾
Queen's Household	0	0.00	0
ENGLAND			
AVON	1	0.12	8
BEDFORDSHIRE	33	6.98	0
BERKSHIRE	-	-	-
BUCKINGHAMSHIRE			
Buckinghamshire	10	2.56	1
Milton Keynes	6	3.34	0
CAMBRIDGESHIRE			
North & East Cambridgeshire	1	0.71	0
Peterborough	4	3.10	1
South & West Cambridgeshire	14	4.03	0
CHESHIRE	20	2.46	5
CORNWALL			
Cornwall	14	3.20	4
Isles of Scilly	0	0.00	0
CUMBRIA			
North & West Cumbria	11	4.97	2
South & East Cumbria	5	2.64	0
DERBYSHIRE			
Derby & South Derbyshire	19	3.94	0
North Derbyshire	10	3.04	0
DEVON			
Exeter & Greater Devon	27	6.34	13
Plymouth & South West Devon	6	2.49	1
Torbay & South Devon	10	5.03	0
DORSET			
Bournemouth, Poole & Eastern Dorset	27	6.76	5
Western Dorset	9	4.76	0
DURHAM			
Darlington & South Durham	4	1.79	0
North Durham	6	2.21	0
EAST SUSSEX			
Brighton & Hove	44	20.73	4
East Sussex	6	1.44	2
ESSEX			
Essex & Thurrock	1	0.09	1
Southend & South East Essex	10	3.69	0
GLOUCESTERSHIRE	12	2.53	0
GREATER MANCHESTER			
Manchester	41	10.97	20
North Manchester	24	5.00	9
South Manchester	7	1.23	3
West Manchester	2	0.32	0

Coroner's Jurisdiction & county district	np-SAD deaths Jan-Dec 2008	Annual death rate per 100,000 population ⁽¹⁾	np-SAD 2007 deaths reported in 2008/9 ⁽²⁾
HAMPSHIRE			
Central Hampshire	9	3.22	1
North East Hampshire	1	0.32	0
Portsmouth & South East Hampshire	18	3.93	19
Southampton & New Forest	19	5.62	1
HEREFORDSHIRE	4	2.72	4
HERTFORDSHIRE	34	3.99	1
HUMBERSIDE			
East Riding & Hull	19	3.93	0
ISLE OF WIGHT	3	2.58	0
KENT			
Central & South East Kent	13	4.89	10
Mid Kent & Medway	15	3.62	1
North East Kent	22	8.13	0
North West Kent	18	4.84	8
LANCASHIRE			
Blackburn, Hyndburn & Ribble Valley	19	8.70	0
Blackpool & the Fylde	13	7.19	0
East Lancashire	12	6.17	3
Preston & West Lancashire	30	5.18	1
LEICESTERSHIRE			
Leicester City & South Leicestershire	7	1.67	14
Rutland & North Leicestershire	5	1.36	0
LINCOLNSHIRE			
Boston & Spalding	1	1.16	3
North Lincolnshire & Grimsby	16	6.24	3
Spilsby & Louth	5	3.85	1
Stamford	0	0.00	0
West Lincolnshire	4	1.83	0
LONDON			
City of London	0	0.00	0
Eastern London	13	1.48	1
Inner North London	41	5.97	1
Inner South London	47	5.64	4
Inner West London	21	2.78	0
Northern London	32	3.02	3
Southern London	13	1.55	0
Western London	54	5.18	25
MERSEYSIDE			
Knowsley, St Helens & Sefton	7	1.43	6
Liverpool	31	8.65	0
Wirral	6	2.39	1
NORFOLK			
Greater Norfolk	36	5.80	1
Great Yarmouth	0	0.00	0
NORTHAMPTONSHIRE	27	4.97	7
NORTHUMBERLAND			
North Northumberland	1	1.05	1
South Northumberland	0	0.00	0
NORTH YORKSHIRE			
North Yorkshire Eastern	5	2.43	0
North Yorkshire Western	6	2.11	0
York	3	1.85	7

Coroner's Jurisdiction & county district	np-SAD deaths Jan-Dec 2008	Annual death rate per 100,000 population ⁽¹⁾	np-SAD 2007 deaths reported in 2008/9 ⁽²⁾
NOTTINGHAMSHIRE	13	1.49	0
OXFORDSHIRE	2	0.39	0
SHROPSHIRE			
Mid & North Shropshire	1	0.62	0
South Shropshire	0	0.00	0
The Wrekin	3	2.34	0
SOMERSET			
Eastern Somerset	8	3.69	1
Western Somerset	10	4.77	0
SOUTH YORKSHIRE			
South Yorkshire East	11	2.51	0
South Yorkshire West	41	6.64	0
STAFFORDSHIRE			
South Staffordshire	14	2.84	2
Stoke-on-Trent & North Staffordshire	15	3.99	9
SUFFOLK	35	6.07	0
SURREY	22	2.48	3
TEESSIDE			
Hartlepool	1	1.37	1
Teesside	22	5.84	1
TYNE & WEAR			
Gateshead & South Tyneside	15	5.35	0
Newcastle-upon-Tyne	9	4.00	13
North Tyneside	-	-	-
Sunderland	2	0.87	0
WARWICKSHIRE	-	-	-
WEST MIDLANDS			
Birmingham	-	-	-
Black Country	12	1.77	2
Coventry	1	0.41	0
Wolverhampton	-	-	-
WEST SUSSEX	29	4.58	1
West YORKSHIRE			
West Yorkshire Eastern	62	6.98	5
West Yorkshire Western	27	3.12	3
WILTSHIRE	2	0.39	0
WORCESTERSHIRE	-	-	-
WALES			
Bridgend & Glamorgan Valleys	7	2.05	6
Cardiff & the Vale of Glamorgan	2	0.56	1
Carmarthenshire	9	6.15	1
Central North Wales	3	1.75	2
Ceredigion	0	0.00	0
Gwent	6	1.33	1
Neath & Port Talbot	7	6.24	0
North East Wales	5	2.18	3
North West Wales	13	8.47	4
Pembrokeshire	4	4.19	0
Powys	3	2.76	0
Swansea	4	2.13	7
NORTHERN IRELAND			
Northern Ireland	30	2.18	46

Coroner's Jurisdiction & county district	np-SAD deaths Jan-Dec 2008	Annual death rate per 100,000 population ⁽¹⁾	np-SAD 2007 deaths reported in 2008/9 ⁽²⁾
THE ISLANDS			
GUERNSEY	0	0.00	0
JERSEY	6	7.97	0
ISLE OF MAN	3	4.47	1
SCOTLAND			
Dumbarton	15	15.24	1

Please note that (0) refers to either no drug-related deaths or death rates of less than 0.01, whilst (–) indicates that no reports were submitted for the specific period from that jurisdiction or area. In subsequent reports these rates may increase as more inquests on deaths in 2008 are held and/or notified to the np-SAD. These rates should therefore be regarded as minimum rates.

- (1) The rate per 100,000 population is based on published mid-year population estimates for local government administrative areas for the years in question. However, the areas covered by 23 of the coroners' jurisdictions in England and Wales as well as the area covered by the Procurators Fiscal region in Dumbarton, are not co-terminous with these boundaries and cover parts of such areas (see Appendix 1). Where administrative areas are split between jurisdictions, the estimated population has been divided into two or three as applicable. However, this means that the population of some coroners' jurisdictions may be either over- or under-estimated. It is necessary to make such assumptions until more accurate figures can be obtained or calculated.
- (2) Notified after the publication of the np-SAD Annual Report, 2008.
- (3) The amalgamations of the following coroner's jurisdictions during the period covered by this report mean that rates for the new areas have been calculated retrospectively based on published figures: High Peak and Scarsdale were merged to form North Derbyshire (1 February 2006); Gloucester and Cheltenham merged to form Gloucestershire (1 April 2006). In Norfolk, King's Lynn and Norwich & Central Norfolk to form Greater Norfolk (6 April 2007); in Cumbria, the three jurisdictions of North East Cumbria, Southern Cumbria & Furness, and Western Cumbria to form two new areas - North & West Cumbria and South & East Cumbria (1 May 2007).

Annex AR3: Changes in annual death rate per 100,000 population for np-SAD cases (16 years old and over), and annual percentage of all inquests held, 2007 and 2008

Coroner's Jurisdiction & county district	Number of np-SAD deaths 2007	Annual death rate per 100,000 population 2007 ⁽¹⁾	Annual % of all inquests held in 2007 ⁽²⁾	Number of np-SAD deaths 2008	Annual death rate per 100,000 population 2008 ⁽¹⁾	Annual % of all inquests held in 2008 ⁽²⁾
Queen's Household	0	0.00	0.00	0	0.00	0.00
ENGLAND						
AVON	20	2.30	3.10	1	0.12	0.14
BEDFORDSHIRE	16	3.38	8.04	33	6.98	13.75
BERKSHIRE	1	0.15	0.30	-	-	-
BUCKINGHAMSHIRE						
Buckinghamshire	17	4.36	10.43	10	2.56	5.88
Milton Keynes	7	3.90	5.56	6	3.34	5.77
CAMBRIDGESHIRE						
North & East Cambridgeshire	4	2.86	5.56	1	0.71	1.49
Peterborough	14	10.83	11.48	4	3.10	3.74
South & West Cambridgeshire	9	2.59	4.31	14	4.03	7.29
CHESHIRE	43	5.28	6.11	20	2.46	2.58
CORNWALL						
Cornwall	38	8.67	10.47	14	3.20	4.11
Isles of Scilly	0	0.00	0.00	0	0.00	0.00
CUMBRIA						
North & West Cumbria	12	5.42	6.19	11	4.97	7.80
South & East Cumbria	4	2.11	2.68	5	2.64	2.84
DERBYSHIRE						
Derby & South Derbyshire	22	4.56	7.75	19	3.94	6.44
North Derbyshire	14	4.26	4.56	10	3.04	3.25
DEVON						
Exeter & Greater Devon	24	5.64	6.25	27	6.34	7.01
Plymouth & South West Devon	10	4.15	3.83	6	2.49	1.55
Torbay & South Devon	6	3.02	4.00	10	5.03	6.29
DORSET						
Bournemouth, Poole & Eastern Dorset	44	11.01	23.91	27	6.76	15.08
Western Dorset	4	2.11	6.15	9	4.76	9.18
DURHAM						
Darlington & South Durham	4	1.79	2.50	4	1.79	2.86
North Durham	3	1.10	1.01	6	2.21	2.69
EAST SUSSEX						
Brighton & Hove	44	20.73	22.00	44	20.73	18.57
East Sussex	17	4.08	6.07	6	1.44	1.84
ESSEX						
Essex & Thurrock	8	0.73	1.53	1	0.09	0.20
Southend & South East Essex	16	5.91	13.68	10	3.69	7.19
GLOUCESTERSHIRE	3	0.63	0.75	12	2.53	2.80

Coroner's Jurisdiction & county district	Number of np-SAD deaths 2007	Annual death rate per 100,000 population 2007 ⁽¹⁾	Annual % of all inquests held in 2007 ⁽²⁾	Number of np-SAD deaths 2008	Annual death rate per 100,000 population 2008 ⁽¹⁾	Annual % of all inquests held in 2008 ⁽²⁾
GREATER MANCHESTER						
Manchester	42	11.24	6.53	41	10.97	5.52
North Manchester	22	4.59	6.36	24	5.00	6.11
South Manchester	8	1.40	1.54	7	1.23	1.14
West Manchester	15	2.37	2.50	2	0.32	0.30
HAMPSHIRE						
Central Hampshire	7	2.51	3.24	9	3.22	5.00
North East Hampshire	7	2.22	5.98	1	0.32	0.83
Portsmouth & South East Hampshire	36	7.86	10.81	18	3.93	5.83
Southampton & New Forest	17	5.03	8.76	19	5.62	8.72
HEREFORDSHIRE	7	4.76	7.22	4	2.72	4.76
HERTFORDSHIRE	19	2.23	4.42	34	3.99	8.23
HUMBERSIDE						
East Riding & Hull	22	4.55	8.98	19	3.93	6.48
ISLE OF WIGHT	6	5.17	8.22	3	2.58	3.37
KENT						
Central & South East Kent	20	7.52	11.98	13	4.89	7.93
Mid Kent & Medway	9	2.17	4.23	15	3.62	6.10
North East Kent	-	-	-	22	8.13	11.22
North West Kent	8	2.15	3.92	18	4.84	9.57
LANCASHIRE						
Blackburn, Hyndburn & Ribble Valley	19	8.70	7.69	19	8.70	6.40
Blackpool & the Fylde	27	14.94	19.57	13	7.19	10.24
East Lancashire	16	8.22	10.67	12	6.17	8.16
Preston & West Lancashire	36	6.22	7.26	30	5.18	6.73
LEICESTERSHIRE						
Leicester City & South Leicestershire	14	3.34	2.11	7	1.67	1.05
Rutland & North Leicestershire	7	1.91	3.76	5	1.36	2.94
LINCOLNSHIRE						
Boston & Spalding	12	13.94	15.79	1	1.16	1.69
North Lincolnshire & Grimsby	11	4.29	8.03	16	6.24	12.60
Spilsby & Louth	12	9.24	18.75	5	3.85	8.93
Stamford	1	0.94	3.85	0	0.00	0.00
West Lincolnshire	13	5.95	10.40	4	1.83	3.13
LONDON						
City of London	0	0.00	0.00	0	0.00	0.00
Eastern London	11	1.25	2.76	13	1.48	3.46
Inner North London	41	5.97	8.54	41	5.97	8.91
Inner South London	56	6.72	9.79	47	5.64	8.16
Inner West London	9	1.19	1.99	21	2.78	4.93
Northern London	57	5.38	11.92	32	3.02	6.25
Southern London	19	2.27	5.97	13	1.55	4.39
Western London	76	7.29	10.00	54	5.18	11.92
MERSEYSIDE						
Knowsley, St Helens & Sefton	9	1.84	3.72	7	1.43	2.59
Liverpool	24	6.70	4.68	31	8.65	6.09
Wirral	16	6.37	5.59	6	2.39	2.25

Coroner's Jurisdiction & county district	Number of np-SAD deaths 2007	Annual death rate per 100,000 population 2007 ⁽¹⁾	Annual % of all inquests held in 2007 ⁽²⁾	Number of np-SAD deaths 2008	Annual death rate per 100,000 population 2008 ⁽¹⁾	Annual % of all inquests held in 2008 ⁽²⁾
NORFOLK						
Greater Norfolk	45	7.25	10.30	36	5.80	8.72
Great Yarmouth	1	1.29	1.69	0	0.00	0.00
NORTHAMPTONSHIRE	32	5.88	11.51	27	4.97	9.03
NORTHUMBERLAND						
North Northumberland	5	5.25	4.46	1	1.05	0.94
South Northumberland	-	-	-	0	0.00	0.00
NORTH YORKSHIRE						
North Yorkshire Eastern	2	0.97	1.33	5	2.43	4.00
North Yorkshire Western	2	0.70	1.67	6	2.11	4.76
York	7	4.31	7.78	3	1.85	2.86
NOTTINGHAMSHIRE	11	1.26	2.42	13	1.49	3.03
OXFORDSHIRE	10	1.94	3.26	2	0.39	0.73
SHROPSHIRE						
Mid & North Shropshire	2	1.25	1.87	1	0.62	0.91
South Shropshire	0	0.00	0.00	0	0.00	0.00
The Wrekin	4	3.12	5.48	3	2.34	3.75
SOMERSET						
Eastern Somerset	8	3.69	5.80	8	3.69	5.19
Western Somerset	5	2.39	3.45	10	4.77	6.37
SOUTH YORKSHIRE						
South Yorkshire East	15	3.42	4.49	11	2.51	3.01
South Yorkshire West	27	4.37	6.18	41	6.64	8.56
STAFFORDSHIRE						
South Staffordshire	23	4.66	6.02	14	2.84	3.95
Stoke-on-Trent & North Staffordshire	20	5.32	4.04	15	3.99	3.13
SUFFOLK	35	6.07	11.67	35	6.07	13.36
SURREY	23	2.59	6.27	22	2.48	5.67
TEESSIDE						
Hartlepool	4	5.47	6.90	1	1.37	1.75
Teesside	26	6.90	8.31	22	5.84	6.30
TYNE & WEAR						
Gateshead & South Tyneside	1	0.36	0.52	15	5.35	6.15
Newcastle-upon-Tyne	23	10.21	6.61	9	4.00	3.06
North Tyneside	-	-	-	-	-	-
Sunderland	4	1.74	1.18	2	0.87	0.59
WARWICKSHIRE	3	0.70	1.41	-	-	-
WEST MIDLANDS						
Birmingham	30	3.15	2.77	-	-	-
Black Country	8	1.18	2.22	12	1.77	3.49
Coventry	9	3.65	5.23	1	0.41	0.47
Wolverhampton	1	0.53	0.59	-	-	-
WEST SUSSEX	35	5.53	9.16	29	4.58	8.17
West YORKSHIRE						
West Yorkshire Eastern	70	7.89	12.99	62	6.98	10.60
West Yorkshire Western	46	5.32	9.48	27	3.12	5.35
WILTSHIRE	1	0.19	0.26	2	0.39	0.57
WORCESTERSHIRE	6	1.32	2.27	-	-	-

Coroner's Jurisdiction & county district	Number of np-SAD deaths 2007	Annual death rate per 100,000 population on 2007 ⁽¹⁾	Annual % of all inquests held in 2007 ⁽²⁾	Number of np-SAD deaths 2008	Annual death rate per 100,000 population on 2008 ⁽¹⁾	Annual % of all inquests held in 2008 ⁽²⁾
WALES						
Bridgend & Glamorgan Valleys	18	5.26	6.55	7	2.05	2.95
Cardiff & the Vale of Glamorgan	4	1.11	0.89	2	0.56	1.83
Carmarthenshire	3	2.05	3.57	9	6.15	9.09
Central North Wales	2	1.16	0.73	3	1.75	1.20
Ceredigion	0	0.00	0.00	0	0.00	0.00
Gwent	17	3.78	11.97	6	1.33	3.95
Neath & Port Talbot	7	6.24	7.69	7	6.24	14.58
North East Wales	3	1.31	1.33	5	2.18	2.17
North West Wales	9	5.86	5.96	12	7.82	7.36
Pembrokeshire	6	6.28	7.59	4	4.19	5.13
Powys	0	0.00	0.00	3	2.76	4.76
Swansea	8	4.26	5.37	4	2.13	2.08
NORTHERN IRELAND						
Northern Ireland)	69	5.00	-	30	2.18	-
THE ISLANDS						
GUERNSEY	1	1.87	11.11	0	0.00	0.00
JERSEY	7	9.39	16.67	6	8.05	11.76
ISLE OF MAN	4	6.03	20.00	3	4.52	7.89
SCOTLAND						
Dumbarton	21	21.43	-	15	15.42	-

Please note that (0) refers to either no drug-related deaths or death rates of less than 0.01, whilst (-) indicates that no reports were submitted for the specific period from that jurisdiction or area prior to or shortly after the preparation of the previous annual report. In subsequent reports these rates may increase as more inquests on deaths in 2008 are held and/or notified to the np-SAD. These rates should therefore be regarded as minimum rates.

- (1) The rate per 100,000 population is based on published mid-year population estimates for local government administrative areas for the years in question. However, the areas covered by 23 of the coroners' jurisdictions in England and Wales are not co-terminous with these boundaries, as well as the area covered by the Procurators Fiscal region in Dumbarton, and cover parts of such areas (see Appendix 1). Where administrative areas are split between jurisdictions, the estimated population has been divided into two or three as applicable. However, this means that the population of some coroners' jurisdictions may be either over- or under-estimated. It is necessary to make such assumptions until more accurate figures can be obtained or calculated.
- (2) Inquests held on all ages.
- (3) The amalgamations of the following coroner's jurisdictions during the period covered by this report mean that rates for the new areas have been calculated retrospectively based on published figures: High Peak and Scarsdale were merged to form North Derbyshire (1 February 2006); Gloucester and Cheltenham merged to form Gloucestershire (1 April 2006). In Norfolk, King's Lynn and Norwich & Central Norfolk to form Greater Norfolk (6 April 2007); in Cumbria, the three jurisdictions of North East Cumbria, Southern Cumbria & Furness, and Western Cumbria to form two new areas - North & West Cumbria and South & East Cumbria (1 May 2007).

Annex AR4: np-SAD cases in 2008 by Drug and Alcohol Action Team area (16 years and over) – number and rate per 100,000 population

Drug and Alcohol Action Team	Number and annual death rate per 100,000 population – usual area of residence		Number and annual death rate per 100,000 population – place of death	
	No	Rate	No	Rate
ENGLAND				
NORTH EAST				
County Durham	8	1.93	8	1.93
Darlington	2	2.48	3	3.72
Gateshead	10	6.39	9	5.75
Hartlepool	1	1.37	1	1.37
Middlesbrough	9	8.14	9	8.14
Newcastle-upon-Tyne	9	4.00	9	4.00
North Tyneside*	1	0.62	1	0.62
Northumberland	1	0.39	2	0.78
Redcar and Cleveland	9	7.94	9	7.94
South Tyneside	2	1.61	3	2.42
Stockton on Tees	4	2.62	3	1.96
Sunderland	3	1.31	2	0.87
NORTH WEST				
Blackburn with Darwen	12	11.25	16	15.01
Blackpool	10	8.59	11	9.45
Bolton	2	0.96	1	0.48
Bury	4	2.73	4	2.73
Cheshire	16	2.85	9	1.60
Cumbria	15	3.65	15	3.65
Halton	2	2.11	2	2.11
Knowsley	1	0.83	0	0.00
Lancashire	50	5.27	48	5.06
Liverpool	26	7.25	30	8.37
Manchester	32	8.56	37	9.90
Oldham	10	5.85	9	5.26
Rochdale	12	7.39	14	8.63
Salford	1	0.56	0	0.00
Sefton	7	3.09	3	1.33
St Helens	0	0.00	0	0.00
Stockport	4	1.75	3	1.32
Tameside	3	1.74	2	1.16
Trafford	4	2.34	3	1.76
Warrington	8	5.09	8	5.09
Wigan	1	0.40	1	0.40
Wirral	11	4.38	11	4.38
YORKSHIRE AND HUMBER				
Barnsley	17	9.35	19	10.45
Bradford	16	4.15	17	4.41
Calderdale	0	0.00	0	0.00
Doncaster	4	1.70	4	1.70
East Riding of Yorkshire	5	1.82	8	2.91
Kingston-upon-Hull	14	6.71	12	5.75
Kirklees	14	4.40	13	4.08
Leeds	40	6.39	41	6.55

Drug and Alcohol Action Team	Number and annual death rate per 100,000 population – usual area of residence		Number and annual death rate per 100,000 population – place of death	
	No	Rate	No	Rate
North East Lincolnshire	10	7.87	10	7.87
North Lincolnshire	5	3.87	5	3.87
North Yorkshire	11	2.25	10	2.04
Rotherham	7	3.43	6	2.94
Sheffield	20	4.59	22	5.05
Wakefield	22	8.42	20	7.65
York	4	2.46	3	1.85
EAST MIDLANDS				
Derby	7	3.66	8	4.18
Derbyshire	21	3.39	19	3.07
Leicester*	5	2.16	5	2.16
Leicestershire	6	1.15	7	1.34
Lincolnshire	12	2.10	10	1.75
Northamptonshire	30	5.52	27	4.97
Nottingham	5	2.09	6	2.51
Nottinghamshire	9	1.42	10	1.58
Rutland	0	0.00	0	0.00
WEST MIDLANDS				
Birmingham*	1	0.13	2	0.25
Coventry	2	0.81	1	0.41
Dudley	2	0.81	5	2.02
Herefordshire	3	2.04	3	2.04
Sandwell	6	2.63	3	1.32
Shropshire	1	0.42	1	0.42
Solihull*	0	0.00	0	0.00
Staffordshire	15	2.22	14	2.07
Stoke-on-Trent	14	7.23	14	7.23
Telford and Wrekin	3	2.34	3	2.34
Walsall	3	1.49	4	1.99
Warwickshire	1	0.23	0	0.00
Wolverhampton	-	-	-	-
Worcestershire	-	-	-	-
EAST				
Bedfordshire	17	5.21	18	5.52
Cambridgeshire	14	2.87	16	3.28
Essex	4	0.36	3	0.27
Hertfordshire	36	4.22	36	4.22
Luton	14	9.53	14	9.53
Norfolk	34	4.87	35	5.02
Peterborough	5	3.87	4	3.10
Southend-on-Sea	9	6.88	9	6.88
Suffolk	35	6.07	33	5.72
Thurrock	0	0.00	0	0.00
LONDON				
Inner London				
Camden	16	8.18	20	10.22
City of London	0	0.00	0	0.00
Hackney	7	4.29	6	3.67
Hammersmith and Fulham	9	6.23	13	9.00
Haringey	10	5.53	6	3.32
Islington	7	4.45	6	3.82
Kensington and Chelsea	9	5.96	8	5.30
Lambeth	17	7.57	27	12.02

Drug and Alcohol Action Team	Number and annual death rate per 100,000 population – usual area of residence		Number and annual death rate per 100,000 population – place of death	
	No	Rate	No	Rate
Lewisham	8	3.86	8	3.86
Newham	4	2.10	4	2.10
Southwark	11	4.89	9	4.00
Tower Hamlets	7	4.09	11	6.43
Wandsworth	1	0.42	0	0.00
Westminster	15	7.38	16	7.87
Outer London				
Barking and Dagenham	3	2.37	3	2.37
Barnet	1	0.38	2	0.76
Bexley	2	1.13	3	1.69
Brent	6	2.74	7	3.20
Bromley	8	3.31	6	2.48
Croydon	4	1.49	3	1.11
Ealing	4	1.62	5	2.02
Enfield	10	4.45	10	4.45
Greenwich	6	3.40	6	3.40
Harrow	7	4.06	6	3.48
Havering	2	1.08	2	1.08
Hillingdon	10	5.02	9	4.52
Hounslow	11	6.20	12	6.77
Kingston-upon-Thames	10	7.74	10	7.74
Merton	1	0.61	0	0.00
Redbridge	1	0.50	1	0.50
Richmond-upon-Thames	4	2.76	3	2.07
Sutton	3	2.02	1	0.67
Waltham Forest*	4	2.29	3	1.72
SOUTH EAST				
Bracknell Forest*	-	-	-	-
Brighton and Hove	40	18.84	42	19.79
Buckinghamshire	10	2.56	9	2.31
East Sussex	8	1.92	6	1.44
Hampshire	28	2.71	25	2.42
Isle of Wight	2	1.72	3	2.58
Kent	53	4.72	54	4.81
Medway towns	11	5.50	11	5.50
Milton Keynes	6	3.34	7	3.90
Oxfordshire*	2	0.39	2	0.39
Portsmouth	9	5.50	9	5.50
Reading*	1	0.85	-	-
Slough*	-	-	-	-
Southampton	9	4.67	12	6.22
Surrey	20	2.25	23	2.59
West Berkshire*	1	0.84	-	-
West Sussex	28	4.43	28	4.43
Windsor and Maidenhead*	1	0.89	-	0.00
Wokingham*	-	-	-	-
SOUTH WEST				
Bath and North East Somerset*	2	1.35	1	0.68
Bournemouth	15	10.91	16	11.64
Bristol*	1	0.29	0	0.00
Cornwall & Isles of Scilly	13	2.95	14	3.18
Devon	31	4.97	29	4.65
Dorset	13	3.85	14	4.15

Drug and Alcohol Action Team	National and annual death rate per 100,000 population – usual area of residence		National and annual death rate per 100,000 population – place of death	
	No	Rate	No	Rate
Gloucestershire	12	2.53	12	2.53
North Somerset*	0	0.00	0	0.00
Plymouth	7	3.39	6	2.91
Poole	5	4.40	6	5.28
Somerset	19	8.00	19	4.45
South Gloucestershire*	0	0.00	0	0.00
Swindon	2	1.32	2	1.32
Torbay	7	6.27	7	6.27
Wiltshire	1	0.28	0	0.00
WALES				
Bro Taf	9	1.52	8	1.35
Dyfed Powys	16	3.85	16	3.85
Gwent	7	1.55	6	1.33
Iechyd Morgannwg	12	2.94	12	2.94
North Wales	20	3.61	21	3.79
NORTHERN IRELAND				
Eastern	16	2.99	15	2.80
Northern	8	2.26	8	2.26
Southern	3	1.14	2	0.76
Western	3	1.32	3	1.32
THE ISLANDS				
GUERNSEY	0	0.00	0	0.00
JERSEY	3	4.52	3	4.52
ISLE OF MAN	5	6.71	6	8.05
SCOTLAND				
Dumbarton	16	16.45	15	15.42

Note: In addition there were a number of cases that could not be allocated to specific DA(A)T areas because they were of no fixed abode and/or the jurisdiction in which the inquest was held covers more than one DA(A)T. Some cases were usually resident outside the UK. Some DA(A)Ts are covered by coroner's jurisdictions that did not submit information or only partial information) to the np-SAD; they are marked thus - *.

Annex AR5: np-SAD cases in 2008 by Drug and Alcohol Action Team area (16 years and over) – demographics and drugs implicated

Drug and Alcohol Action Team	No	Gender		Age group						Ethnicity					Main Drug Strategy drug implicated					
	Total	Male	Female	15-24	25-34	35-44	45-54	55-64	>64	White	Black	Asian	Other	Not known	Heroin/ morphine	Methodone	Hypnotics/ sedatives	Cocaine	Amphetamine	Ecstasy-type
ENGLAND																				
NORTH EAST																				
County Durham	8	7	1	1	5	2	0	0	0	1	0	0	0	7	7	1	1	1	1	0
Darlington	3	2	1	0	1	0	1	0	1	1	0	0	0	2	0	0	1	0	0	0
Gateshead	9	6	3	1	6	2	0	0	0	9	0	0	0	0	5	3	3	1	0	0
Hartlepool	1	1	0	0	1	0	0	0	0	1	0	0	0	0	1	0	0	0	0	0
Middlesbrough	9	6	3	1	3	3	0	1	1	9	0	0	0	0	2	2	2	1	0	0
Newcastle-upon-Tyne	9	8	1	0	5	4	0	0	0	9	0	0	0	0	7	2	2	0	0	1
North Tyneside*	1	1	0	0	0	1	0	0	0	1	0	0	0	0	0	0	0	0	0	0
Northumberland	2	1	1	0	0	0	2	0	0	2	0	0	0	0	0	0	0	0	0	0
Redcar and Cleveland	3	2	1	1	0	0	2	0	0	2	0	0	0	1	0	0	1	0	0	0
South Tyneside	3	3	0	3	0	0	0	0	0	3	0	0	0	0	1	1	1	0	0	2
Stockton on Tees	3	2	1	0	2	1	0	0	0	3	0	0	0	0	1	0	2	0	0	0
Sunderland	2	2	0	0	1	0	0	1	0	0	0	0	0	2	1	0	1	0	0	0
NORTH WEST																				
Blackburn with Darwen	16	14	2	1	3	9	2	0	1	15	0	0	0	1	8	6	1	2	3	0
Blackpool	11	7	4	0	2	2	4	3	0	9	0	0	0	2	3	6	0	0	0	0
Bolton	1	0	1	1	0	0	0	0	0	0	0	0	0	1	1	0	0	1	0	0
Bury	4	2	2	0	2	1	0	1	0	0	0	0	0	4	2	2	0	0	1	0
Cheshire	9	3	6	2	0	2	3	1	1	8	0	0	0	1	3	0	0	0	0	1
Cumbria	15	14	1	3	2	3	5	2	0	14	0	0	0	1	7	3	4	1	3	0
Halton	2	1	1	0	0	1	1	0	0	2	0	0	0	0	0	0	0	0	0	0
Knowsley	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Lancashire	48	28	20	6	13	16	6	5	2	12	0	2	1	33	16	9	7	3	2	2
Liverpool	30	23	7	0	8	17	3	1	1	27	0	0	1	2	17	3	2	8	0	0
Manchester	37	24	13	2	8	9	11	5	2	27	0	0	1	9	10	10	4	6	2	0
Oldham	9	7	2	1	1	3	2	2	0	0	0	1	0	8	2	3	2	3	0	0
Rochdale	14	10	4	0	3	5	1	3	2	0	0	0	0	14	4	4	2	2	0	0
Salford	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Sefton	3	2	1	0	1	1	0	1	0	3	0	0	0	0	1	0	0	2	0	0
St Helens	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Stockport	3	0	3	0	0	0	0	1	2	1	0	0	0	2	0	0	1	0	0	0
Tameside	2	0	2	0	0	1	0	1	0	1	0	0	0	1	1	0	1	0	0	0
Trafford	3	2	1	1	2	0	0	0	0	1	0	1	0	1	2	1	0	2	1	0
Warrington	8	6	2	0	1	3	2	1	1	6	0	0	0	2	3	0	1	1	0	0
Wigan	1	1	0	0	0	1	0	0	0	0	0	0	0	1	1	0	0	0	0	0
Wirral	11	6	5	0	1	8	2	0	0	6	0	0	0	5	4	6	3	1	0	0

Drug and Alcohol Action Team	N o	Gender		Age group						Ethnicity					Main Drug Strategy drug implicated					
	Total	Male	Female	15-24	25-34	35-44	45-54	55-64	>64	White	Black	Asian	Other	Not known	Heroin/ morphine	Metadone	Hypnotics/ sedatives	Cocaine	Amphetamine	Ecstasy-type
YORKSHIRE AND HUMBER																				
Barnsley	19	13	6	1	6	7	4	1	0	19	0	0	0	0	11	5	4	1	1	0
Bradford	17	16	1	3	5	4	4	1	0	15	1	1	0	0	6	1	0	5	1	0
Calderdale	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Doncaster	4	3	1	0	3	1	0	0	0	4	0	0	0	0	1	2	0	2	0	0
East Riding of Yorkshire	8	5	3	0	4	4	0	0	0	6	0	0	0	2	5	1	0	0	1	0
Kingston-upon-Hull	12	9	3	1	6	5	0	0	0	9	0	0	0	3	8	5	5	0	2	0
Kirklees	13	12	1	2	5	5	1	0	0	11	0	0	2	0	5	2	0	4	0	0
Leeds	41	29	12	2	16	10	7	4	2	38	1	0	0	2	13	8	2	6	1	1
North East Lincolnshire	10	9	1	1	4	5	0	0	0	7	0	0	0	3	7	1	1	0	0	0
North Lincolnshire	5	4	1	0	1	2	1	0	1	2	0	0	0	3	1	4	1	0	0	0
North Yorkshire	10	8	2	2	4	2	0	1	1	7	0	0	0	3	6	1	1	0	0	0
Rotherham	6	5	1	0	2	3	1	0	0	6	0	0	0	0	5	3	2	1	0	0
Sheffield	22	15	7	4	8	7	1	2	0	22	0	0	0	0	8	8	5	6	2	2
Wakefield	20	13	7	0	9	5	6	0	0	18	0	0	0	2	9	3	4	2	1	0
York	3	3	0	0	0	2	1	0	0	3	0	0	0	0	1	1	0	0	0	0
EAST MIDLANDS																				
Derby	8	7	1	0	4	4	0	0	0	6	1	0	0	1	5	2	0	2	0	0
Derbyshire	19	16	3	6	3	6	1	0	3	19	0	0	0	0	4	6	3	0	4	0
Leicester	5	5	0	1	3	1	0	0	0	2	0	0	0	3	4	1	0	1	0	0
Leicestershire	7	6	1	1	1	3	1	0	1	1	0	0	0	6	3	1	1	1	0	1
Lincolnshire	10	6	4	1	2	4	1	1	1	5	0	0	0	5	4	1	1	1	0	0
Northamptonshire	27	22	5	3	8	7	5	2	2	26	0	0	1	0	11	7	4	0	1	1
Nottingham	6	5	1	0	3	2	1	0	0	6	0	0	0	0	4	1	2	1	1	0
Nottinghamshire	10	7	3	0	5	3	1	1	0	10	0	0	0	0	6	1	3	2	3	0
Rutland	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
WEST MIDLANDS																				
Birmingham*	2	0	2	0	0	2	0	0	0	2	0	0	0	0	1	0	0	0	0	0
Coventry	1	1	0	0	0	1	0	0	0	1	0	0	0	0	0	0	0	1	0	0
Dudley	5	5	0	2	2	1	0	0	0	4	0	1	0	0	3	3	0	2	0	0
Herefordshire	3	2	1	0	1	1	0	0	1	2	0	0	0	1	1	2	0	0	0	0
Sandwell	3	3	0	1	2	0	0	0	0	2	0	1	0	0	1	1	0	0	0	0
Shropshire	1	0	1	0	0	0	0	0	1	0	0	0	0	1	1	0	0	0	0	0
Solihull*	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Staffordshire	14	10	4	1	5	4	3	1	0	13	0	0	0	1	7	1	1	0	0	0
Stoke-on-Trent	14	13	1	1	6	4	3	0	0	14	0	0	0	0	11	3	1	0	1	0
Telford and Wrekin	3	1	2	0	0	1	0	1	1	1	0	0	0	2	0	0	0	0	0	0
Walsall	4	4	0	0	3	1	0	0	0	2	0	1	0	1	3	1	0	0	0	0
Warwickshire	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Wolverhampton	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Worcestershire	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
EAST																				
Bedfordshire	18	13	5	1	7	7	2	1	0	16	0	0	1	1	7	3	1	0	0	0
Cambridgeshire	16	13	3	2	6	4	2	2	0	14	0	1	0	1	9	1	4	2	1	0
Essex	3	3	0	0	0	3	0	0	0	3	0	0	0	0	1	2	0	0	0	0
Hertfordshire	36	26	10	3	9	11	6	3	4	5	0	0	0	31	10	4	6	9	1	2
Luton	14	10	4	1	4	7	1	0	1	12	0	2	0	0	6	1	0	4	0	1
Norfolk	35	26	9	2	12	10	3	6	2	3	0	0	0	32	17	4	7	1	0	0
Peterborough	4	4	0	0	1	1	1	1	0	3	0	0	1	0	1	1	0	2	0	0

Drug and Alcohol Action Team	N o	Gender		Age group						Ethnicity					Main Drug Strategy drug implicated						
	Total	Male	Female	15-24	25-34	35-44	45-54	55-64	>64	White	Black	Asian	Other	Not known	Heroin/ morphine	Methadone	Hypnotics/ sedatives	Cocaine	Amphetamine	Ecstasy-type	
Southend-on-Sea	9	8	1	0	2	5	0	0	2	9	0	0	0	0	4	4	0	0	0	0	
Suffolk	33	22	11	3	5	13	6	4	2	5	0	0	0	28	7	7	6	1	0	0	
Thurrock	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
LONDON																					
Inner London																					
Camden	20	14	6	0	6	9	4	1	0	15	0	0	0	5	10	2	3	5	1	3	
City of London	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Hackney	6	4	2	0	2	0	3	1	0	4	1	0	1	0	1	1	2	2	1	0	
Hammersmith and Fulham	13	11	2	1	0	9	2	0	1	12	0	0	1	0	4	6	2	1	1	1	
Haringey	6	5	1	0	0	4	1	1	0	3	0	0	0	3	2	2	0	2	0	0	
Islington	6	5	1	1	0	5	0	0	0	4	0	0	0	2	4	0	1	1	0	0	
Kensington and Chelsea	8	5	3	0	0	1	2	3	2	4	0	0	0	4	3	0	1	0	0	0	
Lambeth	27	24	3	3	7	11	4	0	2	11	1	1	2	12	9	6	1	7	2	1	
Lewisham	8	5	3	0	1	5	1	1	0	5	0	0	0	3	6	1	1	2	1	1	
Newham	4	3	1	0	0	2	1	0	1	3	0	0	0	1	1	1	1	0	0	0	
Southwark	9	7	2	1	1	3	4	0	0	6	1	0	0	2	6	1	2	2	0	0	
Tower Hamlets	11	10	1	0	4	5	2	0	0	8	0	0	1	2	3	3	0	2	0	0	
Wandsworth	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Westminster	16	13	3	1	6	4	4	0	1	5	1	0	1	9	5	2	6	6	1	0	
Outer London																					
Barking and Dagenham	3	2	1	0	1	0	1	1	0	1	1	0	0	1	2	0	0	2	0	0	
Barnet	2	1	1	0	0	0	1	0	1	0	0	0	0	2	0	0	2	0	0	0	
Bexley	3	1	2	1	1	1	0	0	0	2	1	0	0	0	1	0	3	0	0	0	
Brent	7	7	0	0	3	1	3	0	0	3	1	1	0	2	5	0	0	2	0	0	
Bromley	6	5	1	1	2	2	0	1	0	2	0	0	0	4	1	1	0	0	0	1	
Croydon	3	1	2	0	1	0	1	1	0	0	0	0	0	3	2	2	2	1	0	0	
Ealing	5	3	2	0	3	1	1	0	0	3	0	2	0	0	1	0	0	0	0	0	
Enfield	10	8	2	2	5	3	0	0	0	4	0	0	0	6	5	1	0	6	0	0	
Greenwich	6	4	2	1	1	4	0	0	0	3	0	0	0	3	2	0	1	1	0	0	
Harrow	6	4	2	0	3	0	3	0	0	6	0	0	0	0	2	0	1	3	1	0	
Havering	2	2	0	0	1	0	0	0	1	1	1	0	0	0	0	0	0	0	0	0	
Hillingdon	9	6	3	1	3	4	1	0	0	7	0	1	0	1	1	0	0	3	1	0	
Hounslow	12	11	1	0	2	7	2	0	1	11	0	0	0	1	2	0	1	0	0	0	
Kingston-upon-Thames	10	10	0	2	1	2	4	0	1	8	0	0	0	2	3	0	3	2	0	0	
Merton	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Redbridge	1	1	0	0	1	0	0	0	0	1	0	0	0	0	1	1	0	1	0	0	
Richmond-upon-Thames	3	2	1	1	0	0	2	0	0	2	0	0	0	1	0	0	1	0	0	0	
Sutton	1	0	1	0	0	1	0	0	0	1	0	0	0	0	1	0	0	1	0	0	
Waltham Forest	3	3	0	0	1	1	1	0	0	2	1	0	0	0	3	0	0	1	0	0	
SOUTH EAST																					
Bracknell Forest*	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Brighton and Hove	42	33	9	3	10	17	4	3	5	38	2	0	0	2	22	2	1	9	5	0	2
Buckinghamshire	9	6	3	0	3	2	2	1	1	7	0	0	0	2	1	4	1	2	0	0	
East Sussex	6	3	3	1	2	2	1	0	0	6	0	0	0	0	2	0	2	2	0	1	
Hampshire	25	20	5	4	6	6	4	3	2	20	0	1	0	4	7	7	4	2	1	0	
Isle of Wight	3	2	1	0	1	0	1	0	1	2	0	0	0	1	1	0	0	1	0	0	
Kent	54	39	15	4	12	14	13	6	5	20	0	2	0	32	26	4	8	4	5	2	
Medway towns	11	7	4	1	5	2	2	0	1	0	0	0	0	11	7	2	0	0	0	0	
Milton Keynes	7	4	3	0	1	2	2	1	1	6	0	0	1	0	5	1	1	0	0	0	
Oxfordshire*	2	2	0	1	0	1	0	0	0	2	0	0	0	0	2	0	0	0	0	0	

Drug and Alcohol Action Team	N o	Gender		Age group						Ethnicity					Main Drug Strategy drug implicated						
	Total	Male	Female	15-24	25-34	35-44	45-54	55-64	>64	White	Black	Asian	Other	Not known	Heroin/ morphine	Metadone	Hypnotics/ sedatives	Cocaine	Amphetamine	Ecstasy-type	
Portsmouth	9	8	1	1	1	3	2	1	1	9	0	0	0	0	2	0	0	1	0	0	
Reading*	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Slough*	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Southampton	12	10	2	1	2	2	4	2	1	6	0	0	0	6	5	1	1	2	1	0	
Surrey	23	15	8	5	5	8	3	1	1	3	0	0	0	20	14	4	3	7	0	1	
West Berkshire*	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
West Sussex	28	21	7	2	2	12	2	5	5	26	0	1	0	1	13	4	5	2	0	0	
Windsor and Maidenhead*	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Wokingham*	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
SOUTH WEST																					
Bath and North East Somerset*	1	1	0	0	0	1	0	0	0	1	0	0	0	0	1	1	0	0	0	0	
Bournemouth	16	13	3	1	6	7	1	1	0	16	0	0	0	0	11	3	4	2	1	1	
Bristol*	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Cornwall & Isles of Scilly	14	12	2	1	8	4	0	0	1	8	0	0	0	6	6	4	2	1	0	0	
Devon	29	23	6	3	6	11	3	3	3	26	0	0	0	3	11	5	4	2	1	0	
Dorset	14	9	5	3	1	2	4	1	3	14	0	0	0	0	5	3	3	0	0	0	
Gloucestershire	12	7	5	2	3	4	1	1	1	12	0	0	0	0	7	1	3	0	0	0	
North Somerset*	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Plymouth	6	5	1	2	1	0	1	2	0	0	0	0	0	6	1	2	3	1	0	0	
Poole	6	3	3	0	2	2	0	0	2	5	0	0	0	1	4	1	3	0	0	0	
Somerset	19	13	6	3	6	5	3	1	1	10	0	0	0	9	11	3	0	1	1	0	
South Gloucestershire*	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Swindon	2	1	1	0	0	1	1	0	0	0	0	0	0	2	0	0	0	0	1	0	
Torbay	7	7	0	0	0	4	3	0	0	7	0	0	0	0	5	3	0	0	0	0	
Wiltshire	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
WALES																					
Bro Taf	8	6	2	2	4	0	0	2	0	6	0	0	0	2	4	2	2	1	0	0	
Dyfed Powys	16	13	3	1	7	6	0	1	1	16	0	0	0	0	8	7	8	0	0	1	
Gwent	6	4	2	1	2	2	1	0	0	2	0	0	0	4	4	0	2	0	0	0	
Iechyd Morgannwg	12	10	2	0	8	3	1	0	0	10	0	0	0	2	10	3	4	1	2	1	
North Wales	21	16	5	2	11	4	1	1	2	3	0	0	1	17	5	6	5	3	0	1	
NORTHERN IRELAND																					
Eastern	16	11	5	1	3	7	3	2	0	15	0	0	0	1	1	1	1	0	0	1	
Northern	8	5	3	0	0	3	2	1	2	6	0	0	0	2	0	0	5	0	0	0	
Southern	2	1	1	0	0	1	1	0	0	2	0	0	0	0	0	0	1	0	0	0	
Western	3	2	1	0	1	1	0	0	1	2	0	0	0	1	1	0	2	0	0	0	
THE ISLANDS																					
GUERNSEY	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
JERSEY	6	4	2	2	1	1	0	1	1	6	0	0	0	0	3	0	1	0	0	0	
ISLE OF MAN	3	3	0	0	1	2	0	0	0	3	0	0	0	0	2	1	1	0	0	0	

Note: In addition there were a number of cases that could not be allocated to specific DA(A)T areas because they were of no fixed abode and/or the jurisdiction in which the inquest was held covers more than one DA(A)T. Some cases were usually resident outside the UK. Some DA(A)Ts are covered by coroner's jurisdictions that did not submit information (or only partial information) to the np-SAD; they are marked thus - *.

Annex AR6: np-SAD cases in 2008 by Primary Care Trust and Strategic Health Authority areas in England and Substance Misuse Advisory Regional Team areas in Wales (16 years and over)

Area	Number and annual death rate per 100,000 population – usual area of residence		Number and annual death rate per 100,000 population – place of death	
	No	Rate	No	Rate
ENGLAND (SHA and PCT)				
NORTH EAST SHA	59	2.81	59	2.81
County Durham	8	1.92	8	1.92
Darlington	2	2.48	3	3.72
Gateshead	10	6.39	9	5.75
Hartlepool	1	1.37	1	1.37
Middlesbrough	9	8.12	9	8.12
Newcastle-upon-Tyne	9	3.98	9	3.98
North Tyneside*	1	0.62	1	0.62
Northumberland	1	0.39	2	0.78
Redcar and Cleveland	9	7.95	9	7.95
South Tyneside	2	1.61	3	2.42
Stockton on Tees Teaching	4	2.62	3	1.96
Sunderland Teaching	3	1.31	2	0.87
NORTH WEST SHA	225	4.03	227	4.07
Ashton, Leigh and Wigan	1	0.40	1	0.40
Blackburn with Darwen	12	11.26	16	15.01
Blackpool	10	8.59	11	9.45
Bolton	2	0.96	1	0.48
Bury	4	2.73	4	2.73
Central and Eastern Cheshire	5	1.36	4	1.09
Central Lancashire	18	4.90	18	4.90
Cumbria Teaching	15	3.66	15	3.66
Halton and St Helens	2	0.84	2	0.84
Heywood, Middleton and Rochdale	12	7.39	14	8.62
Knowsley	1	0.83	0	0.00
Lancashire	19	6.21	16	5.23
Liverpool	26	7.24	30	8.35
Manchester	32	8.53	37	9.87
North Lancashire Teaching	13	4.71	14	5.07
Oldham	10	5.85	9	5.27
Salford	1	0.56	0	0.00
Sefton	7	3.10	3	1.33
Stockport	4	1.75	3	1.32
Tameside and Glossop	3	1.50	2	1.00
Trafford	4	2.34	3	1.75
Warrington	8	5.09	8	5.09
Western Cheshire	5	2.58	5	2.58
Wirral	11	4.39	11	4.39
YORKSHIRE AND HUMBER SHA	189	4.50	190	4.52
Barnsley	17	9.36	19	10.46
Bradford and Airedale Teaching	16	4.15	17	4.41
Calderdale	0	0.00	0	0.00

Area	Number and annual death rate per 100,000 population – usual area of residence		Number and annual death rate per 100,000 population – place of death	
	No	Rate	No	Rate
Doncaster	4	1.70	4	1.70
East Riding of Yorkshire	5	1.82	8	2.91
NHS Hull	14	6.70	12	5.74
Kirklees	14	4.40	13	4.08
Leeds	40	6.37	41	6.53
North East Lincolnshire Care Trust Plus	10	7.79	10	7.79
North Lincolnshire	5	3.97	5	3.97
North Yorkshire and York	15	2.30	13	1.99
Rotherham	7	3.43	6	2.94
Sheffield	20	4.58	22	5.04
Wakefield District	22	8.43	20	7.66
EAST MIDLANDS SHA	95	2.67	92	2.59
Bassetlaw	2	2.20	0	0.00
Derby City	7	3.66	8	4.18
Derbyshire	21	3.55	19	3.21
Leicester City	5	2.15	5	2.15
Leicestershire County and Rutland	6	1.08	7	1.26
NHS Lincolnshire	12	2.09	10	1.75
NHS Northamptonshire	30	5.52	27	4.97
Nottingham City	5	2.08	6	2.50
Nottinghamshire County Teaching	7	1.30	10	1.85
WEST MIDLANDS SHA*	52	1.20	50	1.15
Birmingham East and North*	0	0.00	1	0.32
Coventry Teaching	2	0.81	1	0.40
Dudley	2	0.81	5	2.02
Heart of Birmingham Teaching*	1	0.49	0	0.00
Herefordshire	3	2.04	3	2.04
North Staffordshire	1	0.57	1	0.57
Sandwell	6	2.64	3	1.32
Shropshire County	1	0.42	1	0.42
Solihull*	1	0.61	0	0.00
South Birmingham*	0	0.00	1	0.36
South Staffordshire	14	2.84	13	2.63
Stoke-on-Trent	14	6.98	14	6.98
Telford and Wrekin	3	2.34	3	2.34
Walsall Teaching	3	1.49	4	1.99
Warwickshire	1	0.23	0	0.00
Wolverhampton City	-	-	-	-
Worcestershire	-	-	-	-
EAST OF ENGLAND SHA	168	3.67	168	3.67
Bedfordshire	17	5.21	18	5.52
Cambridgeshire	14	2.87	16	3.28
East and North Hertfordshire	20	4.69	20	4.69
Great Yarmouth and Waveney	13	7.48	13	7.48
Luton	14	9.52	14	9.52
Mid Essex	0	0.00	0	0.00
Norfolk	34	5.48	35	5.64
North East Essex	1	0.38	1	0.38
Peterborough	5	3.87	4	3.09
South East Essex	11	4.07	10	3.70
South West Essex	0	0.00	0	0.00
Suffolk	22	4.58	20	4.16

Area	Number and annual death rate per 100,000 population – usual area of residence		Number and annual death rate per 100,000 population – place of death	
	No	Rate	No	Rate
West Essex	1	0.45	1	0.45
West Hertfordshire	16	3.76	16	3.76
LONDON SHA	218	3.57	226	3.70
Barking and Dagenham	3	2.37	3	2.37
Barnet	1	0.38	2	0.76
Bexley	2	1.13	3	1.69
Brent Teaching	6	2.74	7	3.19
Bromley	8	3.31	6	2.48
Camden	16	8.15	20	10.19
City and Hackney Teaching	7	4.10	6	3.51
Croydon	4	1.49	3	1.11
Ealing	4	1.62	5	2.02
Enfield	10	4.45	10	4.45
Greenwich Teaching	6	3.40	6	3.40
Hammersmith and Fulham	9	6.22	13	8.98
Haringey Teaching	10	5.52	6	3.31
Harrow	7	4.06	6	3.48
Havering	2	1.08	2	1.08
Hillingdon	10	5.01	9	4.51
Hounslow	11	6.20	12	6.76
Islington	7	4.44	6	3.81
Kensington and Chelsea	9	5.96	8	5.30
Kingston	10	7.73	10	7.73
Lambeth	17	7.57	27	12.02
Lewisham	8	3.86	8	3.86
Newham	4	2.10	4	2.10
Redbridge	1	0.50	1	0.50
Richmond and Twickenham	4	2.76	3	2.07
Southwark	11	4.88	9	4.00
Sutton and Merton	4	1.28	1	0.32
Tower Hamlets	7	4.08	11	6.42
Waltham Forest	4	2.29	3	1.71
Wandsworth	1	0.42	0	0.00
Westminster	15	7.36	16	7.85
SOUTH EAST COAST SHA	160	4.62	164	4.74
Brighton and Hove City	40	18.80	42	19.74
East Sussex Downs and Weald	6	2.21	4	1.47
Eastern and Coastal Kent	34	5.78	34	5.78
Hastings and Rother	2	1.38	2	1.38
Medway	11	5.49	11	5.49
Surrey	20	2.28	23	2.62
West Kent	19	3.56	20	3.74
West Sussex	28	4.43	28	4.43
SOUTH CENTRAL SHA	69	2.12	67	2.06
Berkshire East*	1	0.33	-	-
Berkshire West*	2	0.55	-	-
Buckinghamshire	10	2.50	9	2.25
Hampshire	28	2.71	25	2.42
Milton Keynes	6	3.26	7	3.80
NHS Isle of Wight	2	1.72	3	2.59
Oxfordshire*	2	0.40	2	0.40
Portsmouth City Teaching	9	5.48	9	5.48
Southampton City	9	4.65	12	6.20

Area	National and annual death rate per 100,000 population – usual area of residence		National and annual death rate per 100,000 population – place of death	
	No	Rate	No	Rate
SOUTH WEST SHA	128	3.01	126	2.96
Bath and North East Somerset*	2	1.35	1	0.67
Bournemouth and Poole Teaching	20	7.95	22	8.75
Cornwall & Isles of Scilly	13	2.96	14	3.18
Devon	31	4.97	29	4.65
Dorset	13	3.86	14	4.15
Gloucestershire	12	2.53	12	2.53
NHS Bristol*	1	0.29	0	0.00
North Somerset*	0	0.00	0	0.00
Plymouth Teaching	7	3.38	6	2.90
Somerset	19	4.45	19	4.45
South Gloucestershire*	0	0.00	0	0.00
Swindon	2	1.28	2	1.28
Torbay Care Trust	7	6.28	7	6.28
Wiltshire	1	0.28	0	0.00
WALES (SMART)				
North Wales	18	3.25	20	3.61
Dyfed Powys	16	3.85	16	3.85
South Wales	20	2.00	20	2.00
Gwent	7	1.55	6	1.33

Note: In addition there were a number of cases that could not be allocated to specific PCT areas because they were of no fixed abode and/or the jurisdiction in which the inquest was held covers more than one PCT. Some cases were usually resident outside the UK. Some PCTs are covered by coroner's jurisdictions that did not submit information (or only partial information) to the np-SAD; they are marked thus - *.

Annex AR7: np-SAD deaths notified by coroners in Wales, 2008

This section describes the pattern of drug-related deaths in Wales reported by coroners to the np-SAD that meet the Programme's case criteria. This approach is similar to that adopted in Annex 9 for deaths in Northern Ireland.

1. Demography

Notifications of 62 drug-related deaths occurring in 2008 were received from coroners; it is possible that this number may increase as inquests are subsequently completed for deaths that occurred in 2008. The number of such deaths was 77 in 2007.

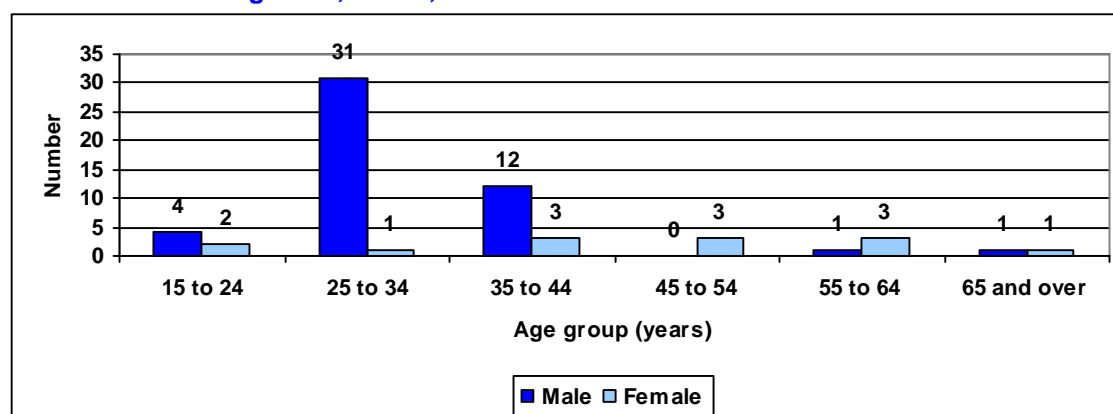
In 2008 there was a rate of 3.21 drug-related deaths per 100,000 population aged 16 years and over, compared with 3.98 in 2007. These rates are low by comparison with England and Scotland but similar to those in Northern Ireland.

The majority (79%) of the cases in 2008 were male (Table AR7.1). The median age at death was 35.5 years (semi-interquartile range = 6.5) (Figure AR7.1). Over four-fifths (86%) of cases were under 45 years. Half (55%) were unemployed, and half (53%) lived with others. Where ethnicity was known, most (97%) decedents were White. Addict status was known in 50 cases, 76% of which had a history of dependence.

Table AR7.1: Demographic variables for drug-related deaths reported by coroners meeting np-SAD criteria, Wales, 2008

Variable	Category	Number (%)
Total		62 (100.0)
Gender	Male	49 (79%)
	Female	13 (21%)
Employment status	Employed	15 (24.2%)
	Unemployed	34 (54.8%)
	Childcare/house person	2 (3.2%)
	Students/pupils	1 (1.6%)
	Retired/sickness/invalidity	6 (9.7%)
	Not known	4 (6.5%)
Living arrangements	Alone	25 (40.3%)
	With others	33 (53.2%)
	No fixed abode	2 (3.2%)
	Other	0 (0.0%)
	Not known	2 (3.2%)

Figure AR7.1: Drug-related deaths reported by coroners meeting np-SAD criteria, by age and gender, Wales, 2008



2. Location of death

Most fatalities (82%) occurred at a defined residential address (i.e. the deceased's home address or other private residential address). Ten percent occurred in hospital and 8% elsewhere.

3. Cause(s) of death

Four-fifths (84%) of cases died from accidental poisoning, 2/62 from intentional self-poisoning, and in 2/62 of cases the intent was undetermined. Three of the deaths were traumatic and two related to mental disorders due to harmful drug use.

4. Substances implicated in death

4.1 All substances

Psychoactive drugs were directly implicated in all cases. The principal substances implicated

were: heroin/morphine (50%); alcohol-in-combination (40%); hypnotics/sedatives (34%); methadone (29%); other opiates/opioid analgesics (24%); anti-depressants (21%); and cocaine (8%) (Table AR7.2).

Figure AR7.2 takes into account data where one of the following drugs was known to be implicated: alcohol-in-combination; anti-depressants; anti-epileptics; anti-psychotics; cannabis; cocaine; ecstasy-type drugs; heroin/morphine; methadone; hypnotics/sedatives; or other opiates/opioid analgesics.

4.2 Single substances

Mono-valent deaths accounted for 50% of all fatalities. The following substances, as the sole implicated drug, accounted for 21/31 deaths: heroin/morphine; anti-depressants; and other opiates/ opioid analgesics (Table AR7.2).

Table AR7.2: Psychoactive substances implicated in deaths reported by coroners meeting np-SAD criteria, Wales, 2008

Drug category	Number (%) of cases where no other substance was implicated	Number (%) of cases where drug was implicated
Total	62 (100.0)	62 (100.0)
Alcohol-in-combination	-	25 (40.3)
Amphetamines	1 (1.6)	2 (3.2)
Anti-depressants	6 (9.7)	13 (21.0)
Anti-epileptics	1 (1.6)	1 (1.6)
Anti-Parkinson's	1 (1.6)	1 (1.6)
Anti-psychotics	1 (1.6)	2 (3.2)
Barbiturates	1 (1.6)	1 (1.6)
Cannabis	1 (1.6)	1 (1.6)
Cocaine	2 (3.2)	5 (8.0)
Ecstasy-type drugs	2 (3.2)	3 (4.8)
GHB	1 (1.6)	1 (1.6)
Heroin/morphine	10 (16.1)	31 (50.0)
Hypnotic/sedatives	1 (1.6)	21 (33.9)
Methadone	2 (3.2)	18 (29.0)
Other opiates/opioid analgesics	5 (8.1)	15 (24.2)

Note: Column totals may sum to more than 100% since more than one substance may be implicated in a death.

5. Age and drug implicated in death

Methadone accounted for most deaths in the 15-24 age-group; heroin/morphine for at least

60% in both the 25-34 and 35-44 age-groups. Anti-depressants accounted for the overwhelming majority of cases in the 45 and over age-group (Table AR7.3).

Figure AR7.2: Drug-related deaths reported by coroners meeting np-SAD criteria, by selected psychoactive drug implicated, Wales, 2008

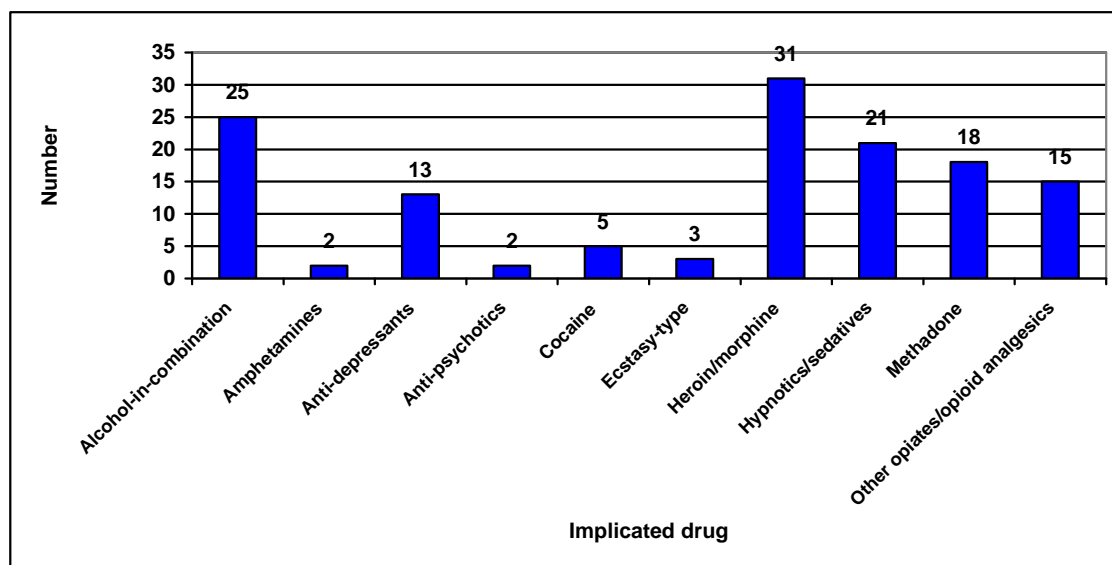


Table AR7.3: Age and psychoactive drug implicated in deaths reported by coroners meeting np-SAD criteria, Wales, 2008

Age-group (years)	Number (%)	Drug category (alone or in combination) most frequently implicated in each age-group
All ages	62 (100.0)	Heroin/morphine (50.0%)
15-24	6 (9.7)	Methadone (50%)
25-34	32 (51.6)	Heroin/morphine (63%)
35-44	15 (24.2)	Heroin/morphine (60%)
45-54	3 (4.8)	Anti-depressants (100%)
55-64	4 (6.5)	Anti-depressants (75%)
65 & over	2 (3.2)	Hypnotics/sedatives (1 case) Anti-depressants (1 case)

6. Gender and drug implicated in death

The pattern of other drug-specific fatality was somewhat different in male and female cases. Among males, the most frequently mentioned drugs were: heroin/morphine (57%); alcohol-in-combination (45%); hypnotics/sedatives (41%); methadone (31%); other opiates/opioid analgesics (22%); and anti-depressants (12%).

Among female cases, the drugs mentioned were: anti-depressants (54%); alcohol-in-combination (38%); heroin/morphine (23%); other opiates/opioid analgesics (23%); and methadone (23%). Compared to male cases, female cases had a higher proportion of fatality associated with anti-depressants (54% vs. 12%). Furthermore, there were no fatalities due to amphetamine, cocaine, ecstasy-type drugs, or GHB among females.

Annex AR8: Drug-related deaths reported to the Scottish Crime and Drug Enforcement Agency, 2008

This section describes the pattern of drug-related deaths in Scotland. The Scottish Crime and Drug Enforcement Agency (SCDEA) on behalf of the Association of Chief Police Officers in Scotland (ACPOS) collate data on drug-related deaths obtained from Scottish police forces. These data are used to populate a police/SCDEA national database which is maintained by the SCDEA. As such the data supplied to the SCDEA remain the property of the submitting force that is also responsible for its accuracy and submission to the database. Drug-related death cases are those that meet the definition used by the Association of Chief Police Officers (Scotland) – “where there is prima facie evidence of a fatal overdose of controlled drugs. Such evidence would be recent drug misuse, for example controlled drugs and/or a hypodermic syringe found in close proximity to the body and/or the person is known to the police as a drug misuser

although not necessarily a notified addict.” Thus, most suicides in Scotland are excluded.

1. Demography

Notifications of 478 drug-related deaths occurring in 2008 were received by the SCDEA, covering the following police force areas: Central Scotland (2.7%); Dumfries & Galloway (1.7%); Fife (6.9%); Grampian (9.8%); Lothian & Borders (17.2%); Northern (2.5%); Strathclyde (51.0%); and Tayside (8.2%).

The majority (81%) of cases were male (Table AR8.1). The median age at death was 33.5 years (semi-interquartile range = 6.8) (Figure AR8.1). The majority (87%) of cases were under 45 years. Where ethnicity was known, the majority were White (99%).

Table AR8.1: Demographic variables for drug-related deaths as reported by Scottish police forces to the SCDEA, 2008

Variable	Category	No	%
Total		478	100.0
Gender	Male	389	81.4
	Female	89	18.6
Age-group (years)	Under 15	0	0.0
	15-24	82	17.2
	25-34	181	37.9
	35-44	153	32.0
	45-54	55	11.5
	55-64	6	1.3
	65 & over	1	0.2

2. Location of death

In line with data protection, the SCDEA database structure does not record information on living arrangements and place of death. Such information was available in only 3% of Scottish cases. Where data on place of death had been made available by the Procurator Fiscal, in Dumbarton; all fatalities occurred at a defined residential address (i.e. the

deceased's home address or other private residential address).

3. Cause(s) of death

The majority of fatalities (92%) were considered to be accidental (i.e. clearly non-deliberate) poisoning. Deaths due to natural causes or poisonings of undetermined intent accounted for the remaining cases.

4. Substances implicated in death

4.1 All substances

Psychoactive drugs were not directly implicated in about 4.0% of cases (n = 19). Of the remaining 459 cases, the principal substances implicated were: heroin/morphine (64%); hypnotics/sedatives (36%); methadone (33%); alcohol in combination with other substances (30%); other opiates/ opioid analgesics (13%); and cocaine (9%) (Table AR8.2).

Figure AR8.2 takes into account data where one of the following drugs was known to be implicated: alcohol-in-combination; anti-depressants; cocaine; ecstasy-type drugs; heroin/morphine; methadone; hypnotics/sedatives; or other opiates/opioid analgesics.

4.2 Single substances

The following substances, as the sole implicated drug, accounted for 162 (35%) deaths: heroin/morphine (19%); methadone (9%); other opiates/opioid analgesics (2%); cocaine (2%); amphetamines (1%) and hypnotics/sedatives (1%) (Table AR8.2).

Table AR8.2: Psychoactive substances implicated in drug-related deaths as reported by Scottish police forces to the SCDEA, 2008

Drug category	Number (%) of cases where no other substance was implicated	Number (%) of cases where drug was implicated*
Total	459 (100.0)	459 (100.0)
Alcohol-in-combination	-	138 (30.1)
Amphetamines	5 (1.1)	10 (2.2)
Anti-depressants	3 (0.7)	32 (7.0)
Anti-epileptics	0 (0.0)	5 (1.1)
Anti-Parkinson's	0 (0.0)	0 (0.0)
Anti-psychotics	0 (0.0)	0 (0.0)
Cannabis	0 (0.0)	5 (1.1)
Cocaine	8 (1.7)	39 (8.5)
Ecstasy-type drugs	2 (0.4)	5 (1.1)
GHB	2 (0.4)	2 (0.4)
Heroin/morphine	86 (18.7)	295 (64.3)
Hypnotic/sedatives	6 (1.3)	165 (35.9)
Methadone	43 (9.4)	153 (33.3)
Other opiates/opioid analgesics	7 (1.5)	60 (13.1)

Note: Column totals may sum to more than 100% since more than one substance may be implicated in a death.

Figure AR8.1: Drug-related deaths as reported by Scottish police forces to the SCDEA, by age and gender, 2008

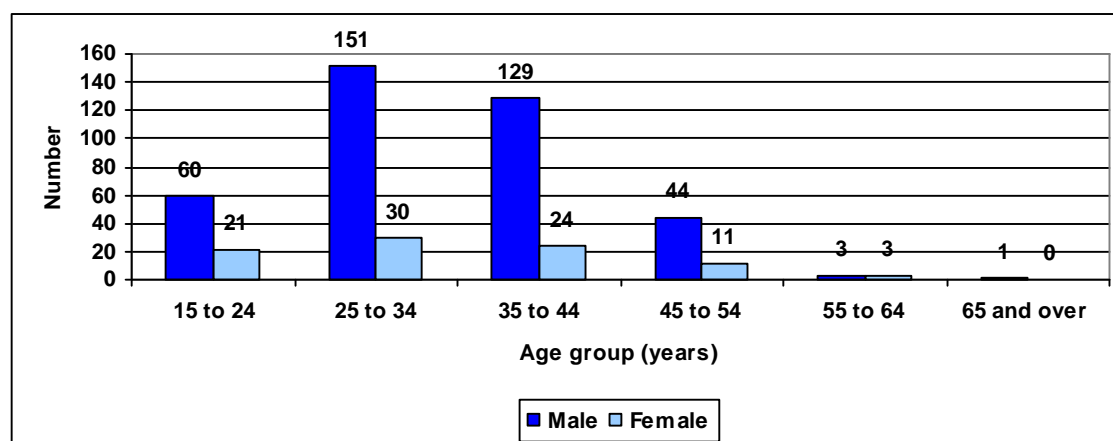
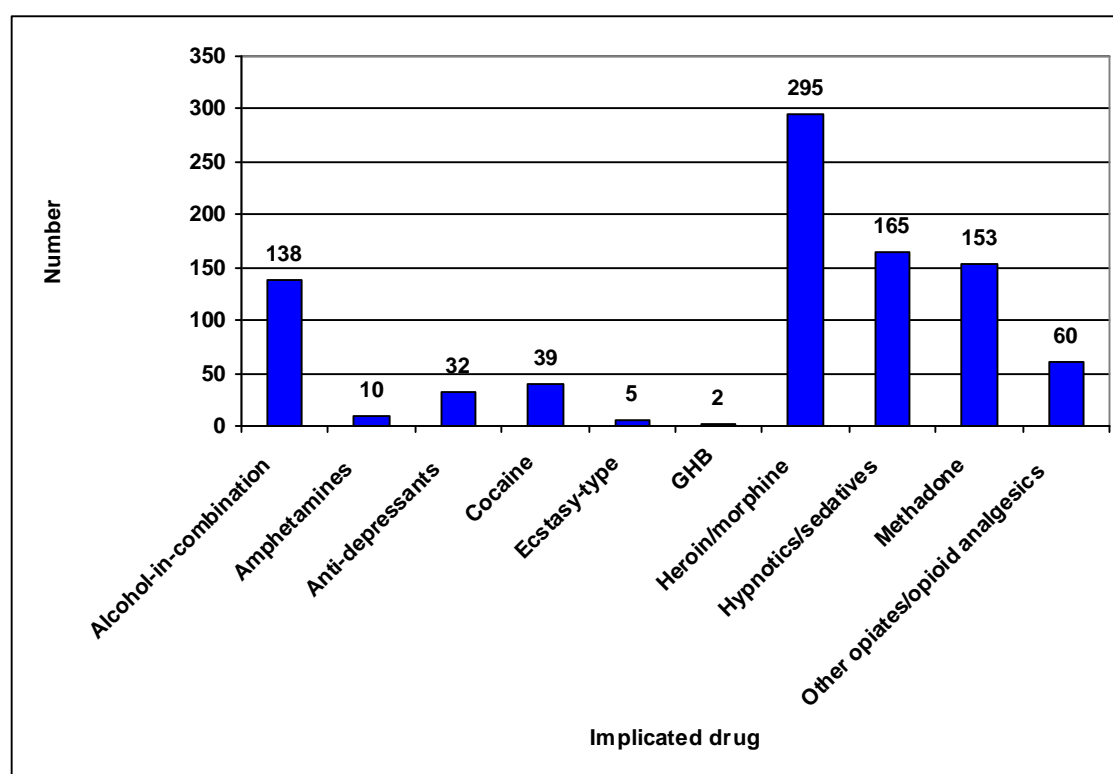


Figure AR8.2: Drug-related deaths as reported by Scottish police forces to the SCDEA, by selected psychoactive drug implicated, 2008



5. Age and drug implicated in death

In cases aged 15 years and over, heroin/morphine was the most frequently mentioned drug contributing to fatality (Table

AR8.3). This was also the case for all of the individual age-groups, except for the 55-64 age-group, where other opiates/ opioid analgesics accounted for 3/5 cases.

Table AR8.3: Age and psychoactive drug implicated in drug-related deaths as reported by Scottish police forces to the SCDEA, 2008

Age-group (years)	Number (%)	Drug category (alone or in combination) most frequently implicated in each age group
All ages	459 (100.0)	Heroin/morphine (64.3%)
14 & under	1 (0.2)	Heroin/morphine (1)-
15-24	76 (16.6)	Heroin/morphine (60.5%)
25-34	176 (38.3)	Heroin/morphine (68.2%)
35-44	147 (32.0)	Heroin/morphine (64.6%)
45-54	54 (11.8)	Heroin/morphine (57.4%)
55-64	5 (1.1)	Other opiates/opioid analgesics (60.0%)
65 and over	0 (0.0)	-

6. Gender and drug implicated in death

In males and females, heroin/morphine was the most frequently mentioned drug, accounting for 67% and 52% of fatalities respectively. However, the pattern of other drug-specific fatality was somewhat different in male and female cases.

Among males, the most frequently mentioned drugs were: heroin/morphine (67%); hypnotics/sedatives (36%); alcohol-in-combination (32%); methadone (30%); other opiates/opioid analgesics (11%); and cocaine (8%). Furthermore, there was a higher proportion of cases of drug-specific fatality among males compared to females in respect of alcohol-in-combination (32% vs. 23%).

Among female cases, the most frequently mentioned drugs were: heroin/morphine (52%); methadone (51%); hypnotics/sedatives (35%); alcohol-in-combination (23%); other opiates/opioid analgesics (21%); cocaine (12%); and anti-depressants (10%). Compared

to male cases, female cases had a higher proportion of fatality associated with methadone (51% vs. 30%); other opiates/opioid analgesics (21% vs. 11%); anti-depressants (10% vs. 6%); and cocaine (10% vs. 6%).

7. Regional patterns

The number of drug-related deaths reported by police to the SCDEA and meeting the np-SAD case criteria fell from 312 in 2004 to 254 in 2005, rose to 374 in 2006. The figure for 2007 was 357, but rose to a new peak of 474 in 2008 (an increase of 34%). This was due to an increase in all police force areas (Table AR8.4). The rates in the Fife, Grampian, Lothian & Borders, Strathclyde and Tayside police force areas are now on a par with the higher rates reported in England and Wales (except Brighton & Hove). There was also a substantial increase reported in Scotland using a number of different definitions (GROS, 2009).

Table AR8.4: Deaths meeting np-SAD criteria as reported by Scottish police forces to the SCDEA, per 100,000 population by police force area, 2006-8

Police force area	Number of deaths 2006	Annual death rate per 100,000 population 2006 ⁽¹⁾	Number of deaths 2007	Annual death rate per 100,000 population 2007 ⁽¹⁾	Number of deaths 2008	Annual death rate per 100,000 population 2008 ⁽¹⁾
Central Scotland Police	16	6.90	9	3.11	13	4.48
Dumfries & Galloway Constabulary	3	2.45	4	2.69	8	5.38
Fife Constabulary	20	6.82	22	5.78	33	9.12
Grampian Police	48	11.03	33	6.16	47	8.71
Lothian & Borders Police	42	5.58	50	5.42	82	8.81
Northern Constabulary	7	3.02	7	2.45	12	4.17
Strathclyde Police	210	11.63	200	9.05	244	11.02
Tayside Police	28	8.68	32	8.37	39	9.82
Scotland	374	8.92	357	6.94	478	9.25
(1) The rate per 100,000 population is based on published mid-year population estimates for local government administrative areas for the years in question.						

Annex AR9: Drug-related deaths recorded by the Northern Ireland Statistics and Research Agency (NISRA), 2008

This section describes the pattern of drug-related deaths in Northern Ireland. The Northern Ireland Statistics and Research Agency (NISRA) provided the data analysed in this section, from registrations recorded by the General Register Office for Northern Ireland. Coroners in Northern Ireland routinely submit returns on drug-related deaths after conducting an inquiry, similar to that in England and Wales.

1. Demography

Notifications of 30 drug-related deaths occurring in 2008 were received from NISRA and coroners which meet the np-SAD case criteria. The number of such deaths was 60 in 2004, 72 in 2005, 57 in 2006, and 70 in 2007. The number of drug-related deaths has varied greatly from year to year in Northern Ireland.

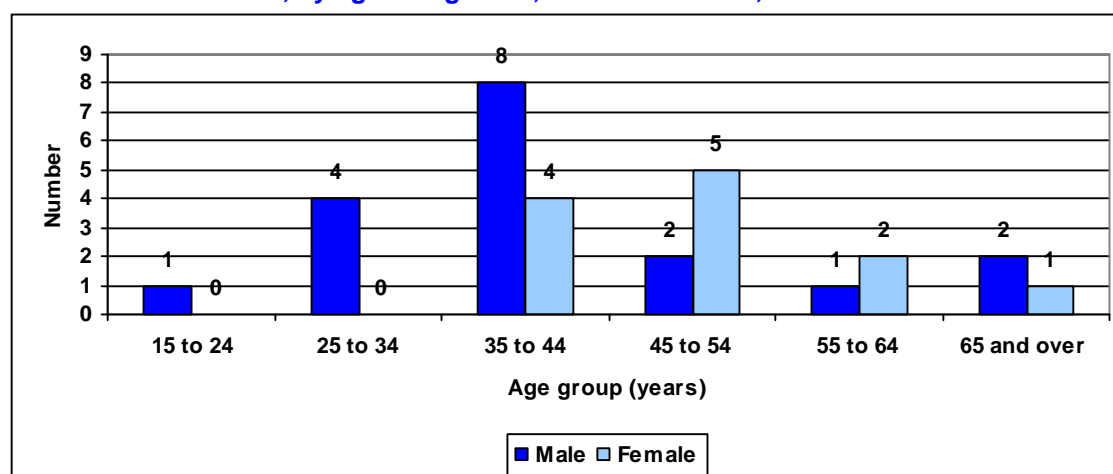
There is also a backlog of inquests and related death registrations which means that further deaths for 2008 may be subsequently notified to NISRA by coroners. In 2008 there was a rate of 2.15 drug-related deaths per 100,000 population aged 16 years and over, compared with 4.54 in 2004, 5.36 in 2005, 4.19 in 2006, and 5.08 in 2007. These rates are low by comparison with the rest of the UK.

Almost two-thirds (18/30) of the cases in 2008 were male (Table AR9.1). The median age at death was 42.8 years (semi-interquartile range = 8.3) (Figure AR9.1). Nearly three-fifths (57%) of cases were under 45 years. Two-thirds (60%) were unemployed, half (53%) lived alone. Where ethnicity was known, all decedents were White. Addict status was known in 18 cases, nine of which had a history of dependence.

Table AR9.1: Demographic variables for drug-related deaths reported by NISRA and coroners meeting np-SAD criteria, Northern Ireland, 2008

Variable	Category	Number (n = 30)
Gender	Male	18
	Female	12
Employment status	Employed	4
	Unemployed	18
	Childcare/house person	3
	Retired/sickness/invalidity	3
	Not known	2

Figure AR9.1: Drug-related deaths reported by NISRA and coroners meeting np-SAD criteria, by age and gender, Northern Ireland, 2008



2. Location of death

Most fatalities (25/30) occurred at a defined residential address (i.e. the deceased's home address or other private residential address). One occurred in hospital and four elsewhere.

3. Cause(s) of death

Eleven cases died from accidental poisoning, eight from intentional self-poisoning, and in 11 cases the intent was undetermined.

4. Substances implicated in death

4.1 All substances

Psychoactive drugs were directly implicated in all but one case. The principal substances implicated were: alcohol-in-combination (20); hypnotics/sedatives (18); other opiates/opioid

analgesics (13); anti-depressants (5); and anti-psychotic (3) (Table AR9.2). This profile is different to that seen in England and Wales and more similar to that seen in Scotland in terms of the large proportion of hypnotics/sedatives involved (GROS, 2008).

Figure AR9.2 takes into account data where one of the following drugs was known to be implicated: alcohol-in-combination; anti-depressants; anti-epileptics; anti-psychotics; cannabis; cocaine; ecstasy-type drugs; heroin/morphine; hypnotics/sedatives; methadone; or other opiates/opioid analgesics.

4.2 Single substances

The following substances, as the sole implicated drug, accounted for 3/30 deaths: anti-depressants; anti-epileptics and other opiates/opioid analgesics (Table AR9.2).

Table AR9.2: Psychoactive substances implicated in deaths reported by NISRA and coroners meeting np-SAD criteria, Northern Ireland, 2008

Drug category	Number of cases where no other substance was implicated (N = 29)	Number of cases where drug was implicated (N = 29)
Alcohol-in-combination	-	20
Amphetamines	0	0
Anti-depressants	1	15
Anti-epileptics	1	2
Anti-Parkinson's	0	1
Anti-psychotics	0	3
Cannabis	0	0
Cocaine	0	1
Ecstasy-type drugs	0	1
Heroin/morphine	0	0
Hypnotic/sedatives	0	18
Methadone	0	0
Other opiates/opioid analgesics	1	13
Note: Column totals may sum to more than 100% since more than one substance may be implicated in a death.		

5. Age and drug implicated in death

In all age groups, except those aged 65 years and over, alcohol-in-combination with other

substances was the most frequently mentioned substance contributing to fatality (Table AR9.3).

Figure AR9.2: Drug-related deaths reported by NISRA and coroners meeting np-SAD criteria, by psychoactive drug implicated, Northern Ireland, 2008

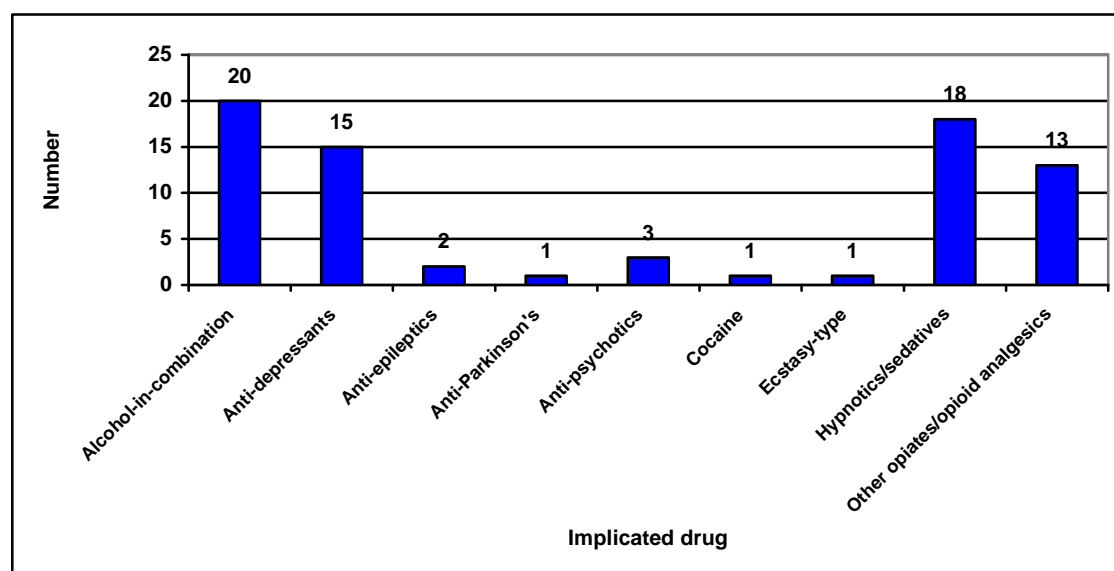


Table AR9.3: Age and psychoactive drug implicated in deaths reported to NISRA meeting np-SAD criteria, Northern Ireland, 2008

Age-group (years)	Number where substance implicated	Drug category (alone or in combination) most frequently implicated in each age group
All ages	29	Alcohol-in-combination (20)
15-24	1	Alcohol-in-combination; anti-depressants, hypnotics/sedatives & other opiates/opioid analgesics (1)
25-34	4	Alcohol-in-combination (3)
35-44	12	Alcohol-in-combination (9) hypnotics/sedatives (9)
45-54	7	Alcohol-in-combination (4)
55-64	3	Alcohol-in-combination (2) Other opiates/opioid analgesics (2)
65 & over	2	Hypnotics/sedatives (2) Other opiates/opioid analgesics (2)

6. Gender and drug implicated in death

The pattern of other drug-specific fatality was somewhat different in male and female cases. Among males, the most frequently mentioned drugs were: alcohol-in-combination (13/18); hypnotics/sedatives (12/18); anti-depressants (9/18); other opiates/opioid analgesics (7/18); anti-epileptics (2/18); anti-psychotics (1/18); cocaine (1/18); and ecstasy-type drugs (1/18).

Among female cases, the drugs mentioned were: alcohol-in-combination (7/11); anti-depressants (6/11); hypnotics/sedatives (6/11); other opiates/opioid analgesics (6/11); anti-psychotics (2/11); and anti-Parkinson's (1/11). Compared to male cases, female cases had a higher proportion of fatality associated with anti-depressants (55% vs. 39%); anti-psychotics (55% vs. 50%); and other opiates/opioid analgesics (18% vs. 6%). Furthermore, there were no fatalities due to amphetamine, cocaine, ecstasy-type drugs, and anti-epileptics among females.

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Appendices

Appendix 1: The *national programme on Substance Abuse Deaths* (np-SAD)

Aims and objectives

The Programme's principal aim is to reduce and prevent drug-related deaths in the UK due to the misuse of drugs, both licit and illicit, by collecting, analysing and disseminating information on the extent and nature of death. The Programme offers a comprehensive prevention package to Drug (and Alcohol) Action Teams (D(A)ATs), Primary Care Trusts (PCTs) and Strategic Health Authorities (SHAs) with a mission to tackle the problem of drug-related deaths.

The Programme's objectives are to:

- Collect and collate drug-related mortality data
- Develop and maintain a computerised surveillance system
- Identify substances implicated in drug-related deaths – including new drugs and new combinations
- Monitor and examine patterns and trends, e.g. geographic, demographic, substances implicated in death, method of death
- Act as an early warning system for new trends in mortality and drug misuse
- Use data as an indicator to estimate the prevalence of substance-related problems and assess the hazards associated with substance abuse
- Collaborate with relevant agencies in research on substance-related mortality locally, nationally and internationally
- Inform and facilitate discussion on the prevention of drug-related deaths, whether accidental or intentional
- Provide data for local and national drug abuse policy formulation and programme planning
- Disseminate information on drug-related mortality to the scientific community, clinicians, policy makers and other interested parties

np-SAD database

The Coroners Drug-Related Deaths Database was established in conjunction with the Home Office, who lead on the UK Government's drug strategy, following the closure of the national UK Addicts Index. The purpose of the database is to provide information for the

management of a national surveillance system to monitor drug-related deaths reported by coroners and procurators fiscal. Data are sent to the np-SAD on a standard reporting form (see below).

Surveillance data management

Data collection

All coroners in the UK (see Appendix 3) are issued with copies of the standard data collection form (see Appendix 4). They are invited to complete the forms on all deaths that meet the criteria described in this report and return them to the np-SAD at the ICDP office at St. George's, University of London for coding and entry onto the database.

Data submission is mostly directly on paper by coroners or their staff. There is also manual completion of the np-SAD data collection form or print-out of completed computer-generated forms using bespoke software. Forms are submitted when inquests are complete – either singly or in batches. Some data are received electronically. Manual extraction of data by team members is undertaken at some coroners' courts – mostly in London.

Data entry and coding

A great deal of consideration was given to the area of data coding to ensure that comparison with other databases was possible and that the final analyses would be useful to readers. For example, all cases were coded for area of residence of the deceased. Causes of death (immediate and underlying) are re-coded according to ICD-10. All drugs (i.e. those implicated in the death) are coded separately according to therapeutic drug category (i.e. hypnotics/sedatives, anti-depressants, opiates, etc).

Statistical analysis

Due to the nature of the information collected by the programme, i.e. drug-related deaths as reported by the coroners, this is an observational study. Hence, statistical methods employed are based on proportions and ratios. Where the data include proportions of incidence for particular groups of interest,

the ratio of the proportions forms a measure of the relative risk in one group compared with that of another. These scales of measurement are generally known as point estimates. Although point estimates can be calculated they do not represent the 'true' values. Each point estimate is subject to random variation. Confidence intervals (CI) provide an indication of the range in the true values for the population as a whole, which would be expected in future investigations. The methods used for quantitative data relied mainly on complex assumptions of distributional form. It may be the case that the assumptions are not always satisfied. In such cases, methods known as distribution-free methods can be applied, also known as non-parametric tests (e.g. Mann-Whitney). The data were analysed using SPSS™ for Windows version 17.

Data storage

The anonymised data-set for coroners is held on a SPSS database for analysis. All data held, whether electronic or paper, is stored securely and treated as confidential. Access is restricted to Programme staff; only aggregated and anonymised data are released to third parties.

Other activities and resources

The np-SAD team also conduct in-depth psychological autopsies on individual cases and carry out confidential inquiry exercises on request. The team also provides analysis of data for specific Drug and Alcohol Action Teams (DAATs), Primary Care Trusts (PCTs) and (Special Health Authorities) SHAs on request.

As a consequence of the work to date, information on the trends and patterns of death among UK drug misusers, including the impact of illicit and prescribed drugs, has been made available.

In addition to the above activities, the Programme

- Is the official custodian of the national UK Addicts Index Access database and paper files covering the period 1968-1997
- Holds a copy of the official Dead Addicts datafile
- Is located in an academic centre with input from relevant disciplines
- Brings to a broad range of expertise from different professional backgrounds – psychiatry, psychology, social science, pharmacology, epidemiology, addictive behavioural science, database, project management, etc.
- Has national and international experience, collaborating in research and training with bodies such as the World Health Organisation, European Monitoring Centre for Drugs and Drug Addiction (EMCDDA), and the European Collaborating Centres for Addiction Studies.

National Steering Group

The np-SAD has a National Steering Group to provide additional expertise to the Programme through involvement and participation. Its principal role is in giving advice on the full range of its activities, including the national surveillance of coroners and production of 6-monthly and annual reports.

Appendix 2: Definitions of drug-related death

np-SAD definition

An np-SAD case is defined as a relevant death where any of the following criteria are met at a completed inquest, fatal accident inquiry or similar investigation:

- One or more psychoactive substances* directly** implicated in death;
- History of dependence or abuse of psychoactive drugs;
- Presence of Controlled Drugs*** at post mortem; or
- Cases of deaths directly due to drugs but with no inquest.

Deaths where solvents and other volatile substances are implicated alone are NOT included. Information on this is collected by the Department of Community Health Sciences at St. George's, University of London; further information can be seen at <http://www.vsareport.org>. Alcohol is included only when implicated in combination with other qualifying drugs.

* 'Psychoactive' substances are those having a direct effect on perception, mood, cognition, behaviour or motor function. Typically these include opiates and opioid analgesics, hypnotics, sedatives, anti-depressants, anti-epileptics, anti-psychotics, hallucinogens and stimulants such as amphetamines and cocaine.

** 'Directly implicated' means that drugs were considered by the coroner or other person

investigating the death to have been instrumental in the coming about of the deceased's death (e.g. through poisoning or intoxication), or causing their powers of reasoning and/or perception to be so affected as to induce them to take risks which they would not have done had they been sober (e.g. thinking they could fly).

*** 'Controlled Drugs' are those drugs specifically classified by the Misuse of Drugs Act 1971 as amended by subsequent legislation. Controlled drugs include opioids, cocaine, amphetamines, cannabis, GHB, hallucinogens and most benzodiazepines.

Who is a drug abuser/dependent?

A drug abuser/dependent case is defined as one with a history of substance abuse where one or more of the following criteria are met:

- Reported as a known illicit drug user by the coroner, based on evidence obtained at inquest;
- Prescribed substitute medication for drug dependence;
- Presence of an illicit drug at post mortem, where not prescribed; or
- Presence of any additional information on the coroner's report suggestive of a history of drug abuse, and where such a history fulfils ICD-10 criteria: (F11-F16 and F19, using the 4-code subdivisions of .0 (acute intoxication), .1 (harmful use), and .2 (dependence syndrome).

Drug misuse definition

Cause of death categories included in the headline indicator of 'drug misuse' deaths used to monitor progress against the Government's drug strategy are defined in terms of ICD-10 codes and Controlled Drug Status. The relevant codes from ICD-10 are given in brackets.

The definition comprises two types of deaths:

a) deaths where the underlying cause of death has been coded to the following categories of mental and behavioural disorders due to psychoactive substance use (excluding alcohol, tobacco and volatile solvents):

(i) opioids (F11);

(ii) cannabinoids (F12);

(iii) sedatives or hypnotics (F13);

(iv) cocaine (F14);

(v) other stimulants, including caffeine (F15);

(vi) hallucinogens (F16); and

(vii) multiple drug use and use of other psychoactive substances (F19)

b) deaths coded to the following categories **and** where a drug controlled under the Misuse of Drugs Act 1971 was mentioned on the death record:

(i) Accidental poisoning by drugs, medicaments and biological substances (X40–X44);

- (ii) Intentional self-poisoning by drugs, medicaments and biological substances (X60–X64);
- (iii) Poisoning by drugs, medicaments and biological substances, undetermined intent (Y10–14);
- (iv) Assault by drugs, medicaments and biological substances (X85); and
- (v) Mental and behavioural disorders due to use of volatile solvents (F18)

Notes:

1. Deaths coded to opiate abuse which resulted from the injection of contaminated heroin have been *included* in the indicator. This differs from the approach taken in Scotland, where these deaths have been *excluded*. This is because the General Register Office for Scotland (GROS) is able to identify deaths which occurred as a result of the use of contaminated heroin, whereas in England and Wales, these deaths cannot be readily identified. In practice, in England and Wales, they will only be included where the drug was mentioned on the death record and the death was coded to one of the ICD codes

on the ONS database of drug-related poisonings and not to an infection code.

2. Specific rules were adopted for dealing with compound analgesics which contain relatively small quantities of drugs listed under the Misuse of Drugs Act, the major ones being dextropropoxyphene, dihydrocodeine and codeine. Where these drugs are mentioned on a death record, they have been excluded if they are part of a compound analgesic (such as *co-proxamol*, *co-dydramol* or *co-codamol*) or cold remedy. Dextropropoxyphene has been excluded on all occasions, whether or not paracetamol or a compound analgesic was mentioned. This is because dextropropoxyphene is rarely, if ever, available other than as part of a paracetamol compound. However, codeine or dihydrocodeine mentioned **alone** were included in the indicator. This is because they are routinely available and known to be abused in this form. This approach is taken by both the Office for National Statistics and the General Register Office for Scotland.

3. Drugs controlled under the Misuse of Drugs Act 1971 include class A, B and C drugs.

Definition used by SCDEA

Deaths reported to the SCDEA by Scottish police forces are those which meet the definition used by the Association of Chief Police Officers (Scotland) – “where there is prima facie evidence of a fatal overdose of controlled drugs. Such evidence would be recent drug misuse, for example controlled

drugs and/or a hypodermic syringe found in close proximity to the body and/or the person is known to the police as a drug misuser although not necessarily a notified addict.” Thus, most suicides in Scotland will be excluded.

Appendix 3: Coroner's jurisdictions/ police force areas reporting drug-related deaths, United Kingdom & Islands

Administrative county/area	Jurisdiction	Description
	(The) Queen's Household	"The Coroner of the Queen's Household has exclusive jurisdiction in respect of inquests and, semble, inquiries which do not lead to inquests, on persons whose bodies are lying within the limits of any of the Queen's palaces or within the limits of any other house where Her Majesty is then demurrant and abiding in her own royal person, notwithstanding the subsequent removal of Her Majesty from such palace or house. The limits of the palace or house are deemed to extend to any courts, gardens or other places within the curtilage of the palace or house but not further. Where a body is lying dead beyond these limits, the coroner of the Queen's Household has no jurisdiction."
ENGLAND		
Avon	Avon	The city of Bristol and the districts of Bath & North East Somerset, North West Somerset & South Gloucestershire
Bedfordshire	Bedfordshire & Luton	The whole county of Bedfordshire and the county of Luton
Berkshire	Berkshire	The whole county of Berkshire
Buckinghamshire	Buckinghamshire	The whole county of Buckinghamshire (excl. Milton Keynes)
	Milton Keynes	The whole county of Milton Keynes
Cambridgeshire	North & East Cambridgeshire	The districts of Fenland & East Cambridgeshire
	Peterborough	The district of Peterborough
	South & West Cambridgeshire	The City of Cambridge, the districts of Huntingdon and South Cambridgeshire
Cheshire	Cheshire	The whole county of Cheshire
Cornwall	Cornwall	The whole county of Cornwall (exc. Isles of Scilly)
	Isles of Scilly	The Isles of Scilly
Cumbria	North and West Cumbria	The districts of Allerdale, Carlisle and Copeland.
	South and East Cumbria	The districts of Barrow-in-Furness, Eden, and South Lakeland.
Derbyshire	Derby & South Derbyshire	The county of Derby and the districts of Erewash & South Derbyshire. The district of Amber Valley (except the parts in the Coroner's Jurisdictions of North Derbyshire). In the district of West Derbyshire, the parishes of Alkmonton, Ashbourne, Atlow, Biggin, Boylestone, Bradbourne, Bradley, Brailsford, Clifton & Compton, Cubley, Doveridge, Edlaston & Wyaston, Fenny Bentley, Hognaston, Hollington, Hulland, Hulland Ward, Hungry Bentley, Kirk Ireton, Kniveton, Lea Hall, Longford, Mapleton, Marston Montgomery, Mercaston, Norbury & Roston, Offcote & Underwood, Osmaston, Rodsley, Shirley, Snelston, Somersal Herbert, Sudbury, Thorpe, Tissington, Yeaveley and Yeldersley
	North Derbyshire	The District of Bolsover and North East Derbyshire. The Boroughs of Chesterfield and High Peak. In the Borough of Amber Valley the parishes of Denthick, Lea and Holloway, South Wingfield and Alfreton. The District of Derbyshire Dales except the parishes in the Derby and South Derbyshire Coroner's District.

Administrative county/area	Jurisdiction	Description
Devon	Exeter & Greater Devon	The districts of East Devon, Exeter, Mid Devon, North Devon, Torridge, West Devon. That part of the district of Teignbridge comprising the parishes of Alphington, Ashton, Bovey Tracey, Bridford, Christow, Chudleigh, Doddiscombsleigh, Dunchideock, Dunsford, Exminster, Hennock, Holcombe Burnell, Ide, Kenn, Lustleigh, Manaton, Moretonhampstead, North Bovey, Shillingford St George, Tedburn St Mary, Trusham & Whitestone.
	Plymouth & South West Devon	The district of Plymouth. The district of South Hams except the parishes in the Torbay and South Devon coroner's district.
	Torbay & South Devon	The district of Torbay. The district of Teignbridge except the parishes in the Coroner's Jurisdiction of Exeter and Greater Devon. That part of the district of South Hams comprising the parishes of Ashprington, Berry Pomeroy, Blackawton, Cornworthy, Dartington, Dartmouth, Dean Prior, Dittisham, Halwell, Harberton, Holne, Kingswear, Littlehampton, Marldon, Rattery, Slapton, Staverton, Stoke Fleming, Stoke Gabriel, Strete, Totnes and West Buckfastleigh
Dorset	Bournemouth, Poole & Eastern Dorset	The counties of Bournemouth & Poole, Christchurch, Purbeck and Wimbourne
	Western Dorset	The districts of West Dorset, North Dorset and Weymouth & Portland
Durham	Darlington & South Durham	The county of Darlington and the districts of Sedgefield and Teesdale {Wear Valley also included}
	North Durham	The districts of Chester-Le-Street, Derwentside, Durham and Easington
East Sussex	Brighton & Hove	The county of Brighton & Hove
	East Sussex	The whole county of East Sussex
Essex	Essex & Thurrock (Essex No 1)	The districts of Basildon, Braintree, Brentwood, Chelmsford, Colchester, Epping Forest, Harlow, Maldon, Tendring, Thurrock and Uttlesford
	Southend & South East Essex (Essex No 2)	The districts of Southend, Rochford and Castle Point
Gloucestershire	Gloucestershire	The county of Gloucestershire
Greater Manchester	Manchester	The district of Manchester
	North Manchester	The districts of Bury, Rochdale & Oldham
	South Manchester	The districts of Stockport, Tameside and Trafford
	West Manchester	The districts of Wigan, Bolton and Salford
Hampshire	Central Hampshire	The districts of Winchester, Test Valley and Eastleigh
	North East Hampshire	The districts of Basingstoke, Hart & Rushmoor and that part of the district of East Hampshire not contained in the Portsmouth & South East Hampshire coroner's district
	Portsmouth & South East Hants	The county of Portsmouth and the districts of Fareham, Gosport and Havant and, in the district of East Hampshire, the parishes of Buriton, Clanfield, Colemore and Priors Dean, East Meon, Froxfield, Hawkley, Horndean, Langrish, Liss, Petersfield, Rowlands Castle and Steep
	Southampton & New Forest	The county of Southampton and the district of New Forest
Herefordshire	Herefordshire	The whole county of Herefordshire
Hertfordshire	Hertfordshire	The whole county of Hertfordshire

Administrative county/area	Jurisdiction	Description
Humberside	East Riding & Hull	The counties of the East Riding of Yorkshire and the city of Kingston-upon-Hull
Isle of Wight	Isle of Wight	The whole county of the Isle of Wight
Kent	Central & South East Kent	The district of Shepway. The borough of Ashford. The district of Dover except those parishes with the North East Kent coroner's district. In the district of Swale, the parishes of Boughton under Bleab, Doddington, Dunkirk, Eastling, Faversham, Graveney & Goodnestone, Hernhill, Luddenham, Lynsted, Newnham, Norton & Buckland, Oare, Ospringe, Selling, Sheldwich Badlesmere & Leaveland, Stalisfield, Stone, Teynham, Throwley
	Mid Kent & Medway	The City of Rochester upon Medway, the districts of Gillingham and Maidstone. The district of Swale, with the exception of Faversham and the parishes in the Coroner's Jurisdiction of East Kent. In the district of Tonbridge and Malling, the parishes of Addington, Aylesford, Birling, Burham, Ditton, East Malling & Larkfield, King's Hill, Leybourne, Mereworth, Offham, Ryarsh, Snodland, Trottiscliffe, Watlington & East Peckham, Wouldham.
	North East Kent	The district of Thanet. The City of Canterbury. In the district of Dover, the parishes of Ash, Aylesham, Deal, Eastry, Eythorpe, Goodnestone, Great Mongeham, Nonington, Northbourne, Preston, Ringwould & Kingsdown, Ripple, Sandwich, Sholden, Staple, Stourmouth, Sutton by Dover, Tilmanstone, Walmer, Wingham, Woodnesborough, Worth.
	North West Kent	The districts of Dartford, Gravesham, Sevenoaks and Tunbridge Wells. The district of Tonbridge and Malling, except the parishes in the Mid-Kent and Medway Coroner's district.
Lancashire	Blackburn, Hyndburn & Ribble Valley	The districts of Blackburn, Hyndburn & Ribble Valley
	Blackpool & the Fylde	The districts of Blackpool and Fylde
	East Lancashire	The districts of Burnley, Pendle and Rossendale
	Preston & West Lancashire	The districts of Lancaster, Wyre, Chorley, Preston, South Ribble and West Lancashire
Leicestershire	Leicester City & South Leicestershire	The county of Leicester and the districts of Blaby, Harborough, Oadby, Wigston
	Rutland & North Leicestershire	The county of Rutland and the districts of Charnwood, Hinckley & Bosworth, Melton and North West Leicestershire
Lincolnshire	Boston & Spalding	The districts of Boston and South Holland
	North Lincolnshire & Grimsby	The counties of North Lincolnshire and North East Lincolnshire
	Spilsby & Louth	The district of East Lindsey, except the parishes in the West Lincolnshire coroners' district. In the district of West Lindsey, the parishes of Bigby, Brocklesbury, Cabourne, Caistor, Claxby, Grasby, Great Limber, Holton Le Moor, Keelby, Kirmond le Mire, Legsby Linwood, Market Rasen, Middle Rasen, Nettleton, Normanby le Wold, North Kelsey, North Willingham, Osgodby, Owersby, Riby, Rothwell, Searby cum Owmbly, Sixhills, Somerby, South Kelsey, Stainton le Vale, Swallow, Swinhope, Tealby, Thoresway, Thorganby and Walesby.

Administrative county/area	Jurisdiction	Description
	Stamford	In the district of South Kesteven, the parishes of Aslackby & Laughton, Barholm & Stowe, Baston, Billingborough, Bourne, Braceborough & Wilsthorpe, Careby Aunby & Holywell, Carlby, Castle Bytham, Corby Glen, Couthorpe & Creeton, Deeping St James, Dowsby, Dunsby, Edenham, Folkingham, Greatford, Haconby, Horbling, Imham, Kirkby Underwood, Langtoft, Little Bytham, Market Deeping, Morton, Pointon & Sempringham, Rippingale, Stamford, Swayfield, Swinstead, Tallington, Thurlby, Toft with Lound & Manthorpe, Uffington, West Deeping and Witham on the Hill
	West Lincolnshire	The district of Lincoln. The district of North Kesteven. The district of South Kesteven, except the parishes in the Coroner's Jurisdiction of Stamford. The district of West Lindsey, except the parishes in the Coroner's jurisdiction of Spilsby & Louth. In the district of East Lindsey, the parishes of East & West Barkwith, Hatton, Langton by Wragby, Panton, West Torrington, Wragby.
London	City of London	City of London
	Eastern London	The London boroughs of Barking, Havering, Newham, Redbridge & Waltham Forest
	Inner North London	The London boroughs of Camden, Hackney, Islington & Tower Hamlets
	Inner South London	The London boroughs of Greenwich, Lambeth, Lewisham & Southwark
	Inner West London	The London boroughs of Wandsworth & Merton, the Royal Borough of Kensington & Chelsea, and the City of Westminster
	Northern London	The London boroughs of Barnet, Brent, Enfield, Haringey & Harrow
	Southern London	The London boroughs of Bexley, Bromley, Croydon and Sutton
	Western London	The London boroughs of Ealing, Hammersmith, Hillingdon, Hounslow and Richmond-upon-Thames, and the Royal Borough of Kingston-upon-Thames
Merseyside	Knowsley, St Helens & Sefton	The districts of Knowsley, St Helens and Sefton
	Liverpool	The district of Liverpool
	Wirral	The district of Wirral
Norfolk	Greater Norfolk	The city of Norwich, the districts of Breckland, Broadland, King's Lynn, North Norfolk, South Norfolk, and West Norfolk
	Great Yarmouth	The borough of Great Yarmouth
Northamptonshire	Northamptonshire	The whole county of Northamptonshire
Northumberland	North Northumberland	The districts of Alnwick and Berwick-upon-Tweed and so much of the districts of Castle Morpeth and Wansbeck as lies north of the line for the time being of the centre of the River Wansbeck
	South Northumberland	The districts of Blyth Valley & Tynedale, and so much of the districts of Castle Morpeth & Wansbeck as lie south of the line for the time being of the centre of the River Wansbeck
North Yorkshire	North Yorkshire Eastern	The districts of Hambleton, Ryedale and Scarborough
	North Yorkshire Western	The districts of Richmondshire, Craven, Harrogate and Selby

Administrative county/area	Jurisdiction	Description
	York	The county of York. In the district of Harrogate, the parishes of Nether and Upper Poppleton. In the district of Ryedale, the parishes of Clifton (without), Earswick, Haxby, Heworth (without), Holtby, Huntington, Murton, New Earswick, Osbaldwick, Rawcliffe, Skelton, Stockton-on-the-Forest, Strensall, Towthorpe, Wigginton. In the district of Selby, the parishes of Dunnington, Elvington, Fulford, Heslington, Kexby, Naburn & Deighton, Wheldrake.
Nottinghamshire	Nottinghamshire	The whole county of Nottinghamshire and the City of Nottingham
Oxfordshire	Oxfordshire	The whole of the county of Oxfordshire
Shropshire	Mid & North Shropshire	The districts of Oswestry, North Shropshire, Shrewsbury & Atcham
	South Shropshire	The districts of South Shropshire and Bridgnorth
	The Wrekin	The whole county of the Wrekin
Somerset	Eastern Somerset	The districts of Mendip and South Somerset
	Western Somerset	The districts of Sedgemoor, Taunton Deane and West Somerset
South Yorkshire	South Yorkshire East	The district of Doncaster and Rotherham
	South Yorkshire West	The districts of Barnsley and Sheffield
Staffordshire	South Staffordshire	The districts of Cannock Chase, East Staffordshire, Lichfield, South Staffordshire, Stafford and Tamworth.
	Stoke-on-Trent & North Staffordshire	The county of Stoke-on-Trent, and the districts of Newcastle-under-Lyme and Staffordshire Moorlands.
Suffolk	Suffolk	The county of Suffolk.
Surrey	Surrey	The whole county of Surrey
Teesside	Hartlepool	The county of Hartlepool
	Teesside	The counties of Middlesbrough, Redcar & Cleveland and Stockton-on-Tees.
Tyne & Wear	Gateshead & South Tyneside	The districts of Gateshead and South Tyneside
	Newcastle-upon-Tyne	The City of Newcastle-upon-Tyne
	North Tyneside	The district of North Tyneside
	Sunderland	The district of Sunderland
Warwickshire	Warwickshire	The whole county of Warwickshire
West Midlands	Birmingham	The districts of Birmingham & Solihull
	Black Country	The districts of Dudley, Sandwell, and Walsall
	Coventry	The district of Coventry
	Wolverhampton	The district of Wolverhampton
West Sussex	West Sussex	The whole county of West Sussex
West Yorkshire	West Yorkshire Eastern	The metropolitan district of Leeds and Wakefield
	West Yorkshire Western	The metropolitan districts of Bradford, Calderdale and Kirklees
Wiltshire	Wiltshire & Swindon	The counties of Wiltshire and Swindon
Worcestershire	Worcestershire	The whole county of Worcestershire
WALES		
	Bridgend & Glamorgan Valleys	The county boroughs of Bridgend, Merthyr Tydfil & Rhondda, Cynon & Taff
	Cardiff & the Vale of Glamorgan	The county of Cardiff and the county borough of the Vale of Glamorgan
	Carmarthenshire	The districts of Carmarthen, Llanelli and Dinefwr
	Central North Wales	The county of Denbighshire, the county borough of Aberconwy & Colwyn.
	Ceredigion	The district of Ceredigion
	Gwent	The county of Monmouthshire, the county borough of Blaenau Gwent, Caerphilly, Newport and Torfaen

Administrative county/area	Jurisdiction	Description
	Neath & Port Talbot	The districts of Neath & Port Talbot. In the borough of Lliw Valley, the communities of Cilybebyll, Clydach, Cwmlinfell, Gwam-Cae-Gurwen, Mawr, Pontardawe & Ystalyfera
	North East Wales	The boroughs of Flintshire and Wrexham. In the district of Glyndwr, the communities of Ceiriog Ucha, Chirk, Glyntraian, Llangedwyn, Llangollen, Llangollen Rural, Llanrhaeadr-ym-Mochnant, Llansantffraid Glyn Ceiriog, Llansilin & Llantysilio.
	North West Wales	The counties of Anglesey, Caernarfonshire, Merionethshire
	Pembrokeshire	The district of Preseli and South Pembrokeshire (including Caldey Island and St Margaret's Island)
	Powys	The whole county of Powys
	Swansea	The district of Swansea. In the borough of Lliw Valley, the communities of Gorseinon, Gowerton, Grovesend, Llangyfelach, Llchwyr, Penllergaer, Pontarsulais, Pont-Lliw.
NORTHERN IRELAND		
NORTHERN IRELAND		Whole of Northern Ireland
THE ISLANDS		
	Guernsey	Alderney, Brecqhou, Guernsey, Herm, Jethou, Lihou, Little Sark, Sark
	Jersey	Jersey
	Isle of Man	Isle of Man
SCOTLAND		
Argyll & Clyde	Dumbarton	Fiscal area (but figures included in Strathclyde Police figures)
Central Scotland Police		Clackmannanshire, Falkirk, and Stirling Council areas
Dumfries & Galloway Constabulary		Dumfries & Galloway Council area
Fife Constabulary		Fife Council area
Grampian Police		City of Aberdeen, Aberdeenshire, and Moray Council areas
Lothian & Borders Police		East Lothian, City of Edinburgh, Midlothian, West Lothian, and the Borders Council areas
Northern Constabulary		Highland, Orkney Islands, Shetlands Islands, and Western Isles Council areas, and parts of Argyllshire (Ardnamuchan and Glencoe) and Morayshire (Grantown-on-Spey and Cromdale)
Strathclyde Police		Argyll and Bute, East Dumbartonshire, Dumbarton and Clydebank, South Lanarkshire, North Lanarkshire, East Ayrshire, North Ayrshire, East Renfrewshire, City of Glasgow, Inverclyde, South Ayrshire, and Renfrewshire Council areas
Tayside Police		Angus, City of Dundee, and Perthshire and Kinross Council areas

Since the start of 2004, the following amalgamations of coroners' jurisdictions in England have occurred: East Berkshire, Reading and West Berkshire to form one for the whole county of Berkshire (1 April 2004); East and West Cornwall to form one for the whole county of Cornwall, but excluding the Isles of Scilly (1 February 2004); in Cumbria, Furness and Southern Cumbria to form South Cumbria & Furness (1 April 2004); Hertford and West & North Hertfordshire to form one for the whole county of Hertfordshire (1 October 2004); in Lincolnshire, Louth and Spilsby to form Spilsby & Louth (1 December 2003); in the West Midlands, Dudley, Sandwell, and Walsall to form Black Country (1 August 2004); in Derbyshire, High Peak and Scarsdale to form North Derbyshire (1 February 2006); in Gloucestershire, Gloucester and Cheltenham to form Gloucestershire (1 April 2006); in Suffolk, Greater Suffolk and Lowestoft to form Suffolk (1 August 2006). Further amalgamations have taken place in 2007, these changes will be reflected in future reports.

The retirement of several coroners has resulted in some coroners taking on responsibility for additional jurisdictions. The Isles of Scilly (regarded as part of Cornwall) are currently being looked after by the coroner for Plymouth & South West Devon. Data for Herefordshire are also submitted now together with those for Worcestershire. The two jurisdictions in Durham are now being looked after by the same coroner, but have not been formally amalgamated. The coroner for Suffolk is also coroner for Southend & South East Essex.

In Northern Ireland, a process of amalgamation has been completed and since 1 April 2006 there has been a single coroner's area covering the whole of the Province. It is centred on the Greater Belfast office and served by three full-time coroners, overseen by a High Court judge.

Appendix 4: np-SAD data collection form

The National Programme on Substance Abuse Deaths (np-SAD)

NOTIFICATION OF DRUG-RELATED DEATHS

Section I Demographic information

Deceased forename(s): _____ Gender: ☐ Male ☐ Female

Family name: _____ Other names known by: _____

Date of birth: ____/____/____ Place of birth: _____

Usual address: _____

Postcode: _____

Ethnicity (tick one only)

- ☐ White ☐ Pakistani ☐ Black African ☐ Other, specify _____
☐ Chinese ☐ Bangladeshi ☐ Black Caribbean ☐ Not known
☐ Indian ☐ Black other, specify _____

Occupational status (tick one only)

- ☐ Employed (manual) ☐ Unemployed ☐ Retired
☐ Employed (non-manual) ☐ Childcare/houseperson ☐ Student/pupil
☐ Self employed ☐ Invalidity/sickness ☐ Other, specify _____
☐ Not known

Living arrangements (tick one only)

- ☐ Alone ☐ Self and children ☐ No fixed abode
☐ With partner ☐ With parent(s) ☐ Other, specify _____
☐ With partner & children ☐ With friend(s) ☐ Not known

Section II Details of death

Date of death: ____/____/____

Place of death: (tick one only)

- ☐ Home ☐ Residential premises (.e. hotel) ☐ In custody
☐ Place of work ☐ Street or highway ☐ Place of recreation/sport
☐ Treatment centre ☐ Educational establishment ☐ Hospital
☐ Other place, specify _____

Cause(s) of death (as given on the death certificate)

1(a) _____
 (b) _____
 (c) _____
 2 _____

The National Programme on Substance Abuse Deaths (np-SAD)

Toxicology

Please list drugs and alcohol present at post mortem (in order of importance, if known)

	Drug/alcohol	Level				Drug/alcohol	Level		
		B	T	U			B	T	U
1					4				
2					5				
3					6				

B = Blood; T = Tissues; U = Urine

Section III Coroner's verdict

Section IV Background information

Recent history of drug use and other relevant information: e.g. evidence of injecting drug use; evidence of 'crack' use; recently released from prison or discharged from treatment programme; psychiatric history; known to alcohol/drug services; length of use; poly-substance user; known health problems associated with substance misuse; last 24 hours of life (if known), time police summoned, any drugs paraphernalia, etc.:

Was the deceased on prescribed psychoactive medication? ☐ Yes ☐ No ☐ Not known

If yes, please list drugs:

1 _____	2 _____
3 _____	4 _____
5 _____	6 _____

Was the deceased a drug addict or known drug abuser? ☐ Yes ☐ No ☐ Not known

Section V Coroner's details

Coroner's name: _____ Date inquest completed: ____/____/____

Jurisdiction: _____ Office: _____

Signature: _____ Date: ____/____/____

Please send completed form to:

National Programme on Substance Abuse Deaths (np-SAD)
International Centre for Drug Policy
St George's, University of London
FREEPOST LON 10141,
London SW17 0BR

For general enquiries: Tel 020 8725 2623 or Fax 020 8266 6494

This form is available electronically

Copies available from

National Programme on Substance Abuse Deaths (np-SAD)
International Centre for Drug Policy (ICDP)
St George's, University of London
Cranmer Terrace
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SW17 0RE

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E-mail: npSAD@sgul.ac.uk

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